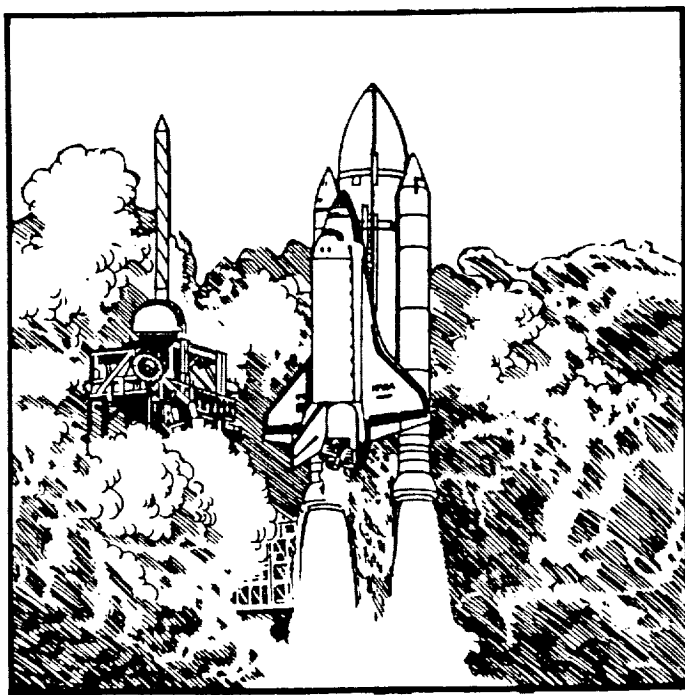


ANNUAL PROCUREMENT REPORT

Fiscal Year 1993



National Aeronautics and
Space Administration

N94-21625

(NASA-TM-109393) NASA PROCUREMENT
REPORT, FY 1993 Annual Report
(NASA) 53 p

Unclass

G3/81 0201776

INTRODUCTION

This report presents summary data on all NASA procurement actions and detailed information on contracts, grants, agreements and other procurements over \$25,000 awarded by NASA during Fiscal Year 1993.

The dollar value on procurements over \$25,000 amounted to 97 percent of the total dollar value of procurement actions completed during Fiscal Year 1993. However, these larger procurements accounted for only 29 percent of the total actions.

Procurement action, as used in this report, means contractual actions to obtain supplies, services or construction which increase or decrease funds. A procurement action thus may be a new procurement, or modifications such as supplemental agreements, change orders, or terminations to an existing contract that change the total amount of funds obligated. An obligation is a contractual commitment to pay for supplies or services that are specified in the contract.

The report was prepared by the Procurement Systems Division, Office of Procurement, NASA Headquarters. Inquiries should be addressed to:

National Aeronautics and Space Administration
Office of Procurement (Code HM)
Washington, D.C. 20546

CONTENTS

Page

| | |
|---|----|
| SUMMARY..... | 2 |
| I. TOTAL PROCUREMENTS..... | 4 |
| II. AWARDS BY TYPE OF CONTRACTOR..... | 4 |
| III. COMPETITION IN NASA AWARDS..... | 7 |
| A. Competition in Contracting Act..... | 7 |
| B. Reporting of Competition..... | 8 |
| C. Competition During Fiscal Year 1993..... | 8 |
| IV. AWARDS TO BUSINESS FIRMS..... | 12 |
| A. Awards By Contract Type..... | 12 |
| B. Small Business Participation..... | 14 |
| C. Distribution of Small Business Awards..... | 16 |
| D. Small Disadvantaged Business Participation..... | 19 |
| E. Women-Owned Small Business Participation..... | 20 |
| F. Labor Surplus Preference..... | 20 |
| G. Awards by Type of Effort..... | 21 |
| H. One Hundred Principal Contractors..... | 22 |
| V. AWARDS TO EDUCATIONAL & OTHER NONPROFIT INSTITUTIONS..... | 27 |
| A. Distribution by Type of Institution & Award..... | 27 |
| B. One Hundred Principal Educational & Nonprofit Institutions..... | 27 |
| VI. CONTRACT FOR OPERATION OF JET PROPULSION LABORATORY..... | 33 |
| VII. AWARDS THROUGH OTHER GOVERNMENT AGENCIES..... | 33 |
| VIII. U.S. GEOGRAPHICAL DISTRIBUTION OF AWARDS..... | 34 |
| IX. AWARDS PLACED OUTSIDE THE UNITED STATES..... | 37 |
| X. PROCUREMENT ACTIVITY BY INSTALLATION..... | 38 |
| GLOSSARY..... | 39 |
| APPENDIXES..... | 41 |

SUMMARY

NASA's procurements during Fiscal Year 1993 totalled \$13,160.4 million. This is 2.4 percent less than was awarded during Fiscal Year 1992 (for further detail see Page 4).

Approximately 80 percent of the total awards were placed directly with business firms, 8 percent with the California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory, 8 percent with educational and other nonprofit institutions and 4 percent with or through other Government agencies (Page 5).

Eighty-one percent, or \$8.6 billion, of the \$10.6 billion total procurement awards available for competition were made on a competitive basis. Of the total awards available for competition, \$767 million, or 7.2 percent, represented competitive new awards, and \$7.9 billion, or 73.9 percent, constituted within-scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. Approximately \$699 million, or 6.6 percent, of the total awards were noncompetitive. Of these, \$241 million, or 2.3 percent, of the total available for competition represented new noncompetitive awards, and \$458 million, or 4.3 percent, constituted other than competitive modifications to contracts awarded in prior years. In addition, \$1.3 billion, or 12.3 percent, of the total available for competition represented follow-on awards to companies that had been previously selected on a competitive basis (Page 11). It should be noted that awards associated with the contracts for the operation of NASA's Jet Propulsion Laboratory during Fiscal Year 1993 are excluded from the procurements available for competition.

With respect to contract types, awards on contracts having cost-plus-award-fee provisions amounted to 76 percent of the total awards over \$25,000 to business firms. Awards on firm-fixed-price contracts constituted 9 percent of the total. Cost-plus-fixed-fee contracts accounted for 9 percent of the total. Incentive contracts, both cost-plus-incentive-fee and fixed-price-incentive, made up 3 percent of the total awards (Page 13).

Small business firms received \$1,060.7 million or 10 percent of NASA's direct awards to business firms. This percentage reflects the fact that most of the awards to business firms were for large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$831.3 million to business firms during the year, small business firms received \$284.7 million, or 34.2 percent (Page 15). Included

in the small business total were NASA awards of \$86.0 million to small and small disadvantaged business through the Small Business Innovation Research Program (Page 16).

Disadvantaged firms received \$333.5 million of the \$1,060.7 million awarded to small business firms in prime contract awards. The \$333.5 million comprised \$68.7 million direct awards and \$264.8 million under Section 8(a) of the Small Business Act (Page 19). In addition, small business firms owned and controlled by women have participated in NASA's procurement program and have received prime contract awards totalling \$111.0 million, while labor surplus area preference awards totalled \$11.0 million (Page 20).

During the year, all 50 states and the District of Columbia participated in NASA procurements over \$25,000. These larger awards went to 2,430 business firms in 46 states and the District of Columbia and to 569 universities and nonprofit organizations in 50 states and the District of Columbia (Page 34).

Note: In this report, all tables and charts present data on total procurements of the types specified in the respective sections. Where the information is limited, e.g., to contracts over \$25,000, such limitation is indicated by footnotes.

NASA PROCUREMENTS FOR FISCAL YEAR 1993

I. TOTAL PROCUREMENTS

Fiscal Year 1993 - NASA's procurements in Fiscal Year 1993 totalled \$13,160.4 million. This is \$317.8 million, or 2.4 percent less than in Fiscal Year 1992. The number of procurement actions totalled 110,900.

Trend, Fiscal Years 1989 - 1993 - The trend in procurement obligations versus total NASA obligations during the period Fiscal Years 1989-1993 is shown in terms of dollars and percentages in the table listed below.

PROCUREMENT OBLIGATIONS VS. TOTAL NASA OBLIGATIONS*
FISCAL YEARS 1989 - 1993
(MILLIONS OF DOLLARS)

| Fiscal Year | Total NASA Obligations | <u>Procurement Obligations</u> | |
|----------------|---------------------------|--------------------------------|---------------------------|
| | | Amount | % of Total Obligations |
| 1993 | \$14,860.8 | \$13,160.4 | 88.6 |
| 1992 | 15,150.0 | 13,478.2 | 89.0 |
| 1991 | 14,687.0 | 13,159.0 | 89.6 |
| 1990 | 13,955.3 | 12,565.2 | 90.0 |
| 1989 | 12,299.7 | 10,876.4 | 88.4 |

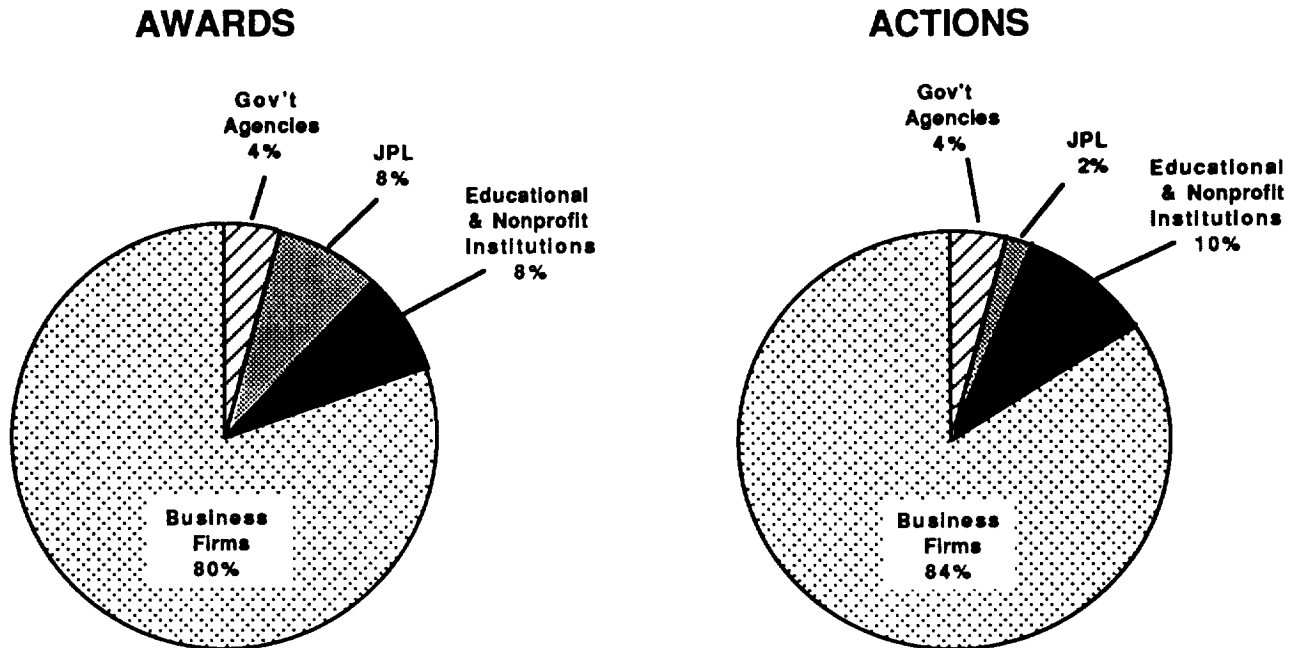
*Total NASA obligations include salaries, benefits and travel of NASA employees.

II. AWARDS BY TYPE OF CONTRACTOR

Fiscal Year 1993 - The distribution of NASA's procurement obligations is shown in Figure 1. Awards to business firms accounted for 80 percent of the total obligations. These awards totalled \$10,497.9 million, which is \$218.8 million or 2.0 percent less than in Fiscal Year 1992. Procurements placed through other Government agencies totalled \$508.4 million, \$9.8 million or 2.0 percent more than in Fiscal Year 1992. Awards, including grants and agreements, to educational and other nonprofit institutions totalled \$1,044.4 million, \$87.3 million or 9.1 percent more than in Fiscal Year 1992. Awards on contracts with California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory amounted to \$1,029.8 million, \$199.8 million or 16.3 percent less than in Fiscal Year 1992. NASA awarded \$79.9 million outside the United States which was 4.9 percent more than in Fiscal Year 1992.

AWARDS BY TYPE OF CONTRACTOR

FISCAL YEAR 1993



| | <u>(Millions)</u> |
|--------------------------|-------------------|
| <u>Total</u> | <u>\$13,160.4</u> |
| Business Firms | 10,497.9 |
| Educational Institutions | 707.8 |
| Nonprofit Organizations | 336.6 |
| JPL | 1,029.8 |
| Government Agencies | 508.4 |
| Outside United States | 79.9 |

| | <u>(Thousands)</u> |
|--------------------------|--------------------|
| <u>Total</u> | <u>110.9</u> |
| Business Firms | 92.8 |
| Educational Institutions | 8.2 |
| Nonprofit Organizations | 2.9 |
| JPL | 2.3 |
| Government Agencies | 4.3 |
| Outside United States | .4 |

Figure 1

Trend, Fiscal Years 1989 - 1993 - The trend in the distribution of NASA's direct procurements by type of contractor during the period Fiscal Years 1989-1993 is shown in terms of dollars and in percentages of total annual procurements in the table listed below.

AWARDS BY TYPE OF CONTRACTOR
FISCAL YEARS 1989 - 1993

| | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <u>AWARDS IN MILLIONS</u> | | | | | |
| <u>TOTAL</u> | <u>\$10,876</u> | <u>\$12,565</u> | <u>\$13,159</u> | <u>\$13,478</u> | <u>\$13,160</u> |
| BUSINESS FIRMS | 8,568 | 10,071 | 10,417 | 10,717 | 10,498 |
| EDUCATIONAL | 464 | 514 | 592 | 659 | 708 |
| NONPROFIT | 180 | 201 | 244 | 298 | 336 |
| JPL | 1,058 | 1,107 | 1,140 | 1,230 | 1,030 |
| GOV'T AGENCIES | 543 | 610 | 693 | 498 | 508 |
| OUTSIDE U.S. | 63 | 62 | 73 | 76 | 80 |
| <u>PERCENT OF TOTAL</u> | | | | | |
| <u>TOTAL</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| BUSINESS FIRMS | 79 | 80 | 79 | 79 | 80 |
| EDUCATIONAL | 4 | 4 | 4 | 5 | 5 |
| NONPROFIT | 2 | 2 | 2 | 2 | 3 |
| JPL | 10 | 9 | 9 | 9 | 8 |
| GOV'T AGENCIES | 5 | 5 | 5 | 4 | 4 |
| OUTSIDE U.S. | * | * | 1 | 1 | * |

*Less than .05 percent.

Appendix I shows distribution of NASA direct procurements by type of contractor for the period Fiscal Years 1961-1993 (See Page 42).

III. COMPETITION IN NASA AWARDS

A. Competition in Contracting Act

Full and open competition, with limited exceptions, is the required standard for procurements within the federal government in accordance with the Competition in Contracting Act (P.L. 98-369). Full and open competition means that all responsible sources are permitted to compete. The competitive procedures authorized for use in full and open competition are sealed bidding; competitive proposals (if sealed bidding is not appropriate); a combination of these procedures (such as two-step sealed bidding); and other competitive procedures expressly provided for, including architect-engineer procedures in accordance with Public Law 92-582, broad agency announcements for basic research proposals, and General Services Administration multiple award schedules.

Contracting without providing for full and open competition is provided for only under the following circumstances:

- (1) Only one responsible source exists and no other supplies or services will satisfy agency requirements;
- (2) Unusual and compelling urgency;
- (3) Industrial mobilization; or engineering, developmental, or research capability;
- (4) International agreement;
- (5) Statutory authorization or requirement;
- (6) National security; and,
- (7) Public interest.

Written justifications are required at NASA in order to award procurements on other than a full and open competition basis. The approvals for these justifications are as follows:

| <u>Size of Procurement</u> | <u>Approving Official</u> |
|----------------------------|---------------------------------------|
| \$100,000 or less | A level above the contracting officer |
| \$100,000 - \$1 million | Center Competition Advocate |
| \$1 million - \$10 million | Center Director |
| Over \$10 million | NASA Procurement Executive |

To enhance and promote competition and eliminate barriers to full and open competition, NASA has developed a competition advocacy program. In addition to appointing an agency competition advocate, a competition advocate has been designated at each NASA Center.

B. Reporting of Competition

Federal agencies are required to submit to Congress an annual report summarizing accomplishments of the agency's competition advocacy program during the past year. In addition, the report describes proposed actions for the current year to increase competition and reduce noncompetitive contract awards. For measuring competition statistics, awards to universities and nonprofit organizations, as well as awards to business, are included in the overall base. For the purpose of developing and reporting uniform competition statistics, all federal agencies use this common baseline.

The reporting of competition excludes from the base the following categories of procurement actions, for which there is no opportunity for competition:

- (1) Any procurements authorized or required by statute to be awarded to a designated source;
- (2) Awards under Section 8(a) of the Small Business Act, as amended;
- (3) Awards for utilities (excluding telecommunications) where there is no opportunity for competition;
- (4) Directed acquisitions for foreign governments;
- (5) Brand named products for authorized resale; and,
- (6) Other awards for which there is no opportunity for competition.

C. Competition During Fiscal Year 1993

Overall Competitive Performance - NASA's awards to business firms, educational institutions, and nonprofit organizations for Fiscal Year 1993 are shown in Figure 2. Of the total awards of \$10,649.1 million available for competition, \$8,635.6 million, or 81.1 percent, represents competed procurements; \$1,314.5 million, or

12.3 percent, represents follow-on procurements which were made to contractors that had been previously awarded competitive contracts; \$699.0 million, or 6.6 percent, constituted other than competitive procurements. It should also be noted that \$2,511.3 million in awards represented procurements that were not available for competition. These are the procurements identified above in the Reporting of Competition discussion. Also included in this category are grants, cooperative agreements, awards to other government agencies, small purchases not over \$2,500, and awards to the California Institute of Technology for operation of the Jet Propulsion Laboratory.

Competitive Procurements - Of the \$8,635.6 million in awards which were competed, \$766.7 million, or 8.9 percent of these awards, represented new contracts, and \$7,868.9 million, or 91.1 percent, were in-scope modifications (incremental funding actions and change orders) to contracts awarded on a competitive basis in prior years. Of the \$766.7 million in new awards, \$622.6 million, or 81.2 percent, were contracts awarded through negotiation; while \$144.1 million, or 18.8 percent, were awarded on the basis of sealed bidding. The preponderance of competitive awards made through the negotiation process reflects NASA's principal mission as a research and development agency. A significant portion of the procurements awarded through sealed bidding were for construction efforts.

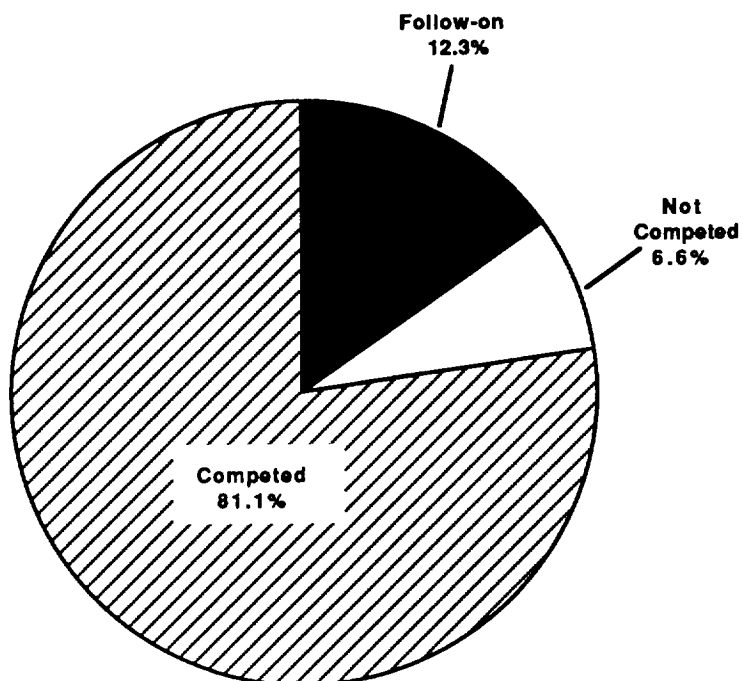
Noncompetitive Procurements - Of the \$699.0 million in noncompetitive awards, \$241.4 million, or 34.5 percent, represented new awards; whereas \$457.6 million, or 65.5 percent, constituted other than competitive modifications to contracts awarded in prior years. Awards in this category are supported by justifications for other than full and open competition.

Noncompetitive New Awards - Of the \$241.4 million in noncompetitive new awards, \$169.1 million were awards over \$25,000. Of these awards, the justifications for other than full and open competition for 94.7 percent, or \$160.2 million, in new noncompetitive awards were based on the first CICA exception indicated above, only one responsible source. The justifications for 1.7 percent, or \$2.9 million, in new noncompetitive awards were based on the second CICA exception, unusual or compelling urgency. The justification for an additional 1.9 percent, or \$3.2 million, in new noncompetitive awards were based on the third CICA exception, industrial mobilization; or engineering, developmental or research capability. The justifications for the remaining 1.7 percent of the new noncompetitive awards cited CICA exceptions 4, international agreement; 5, statutory authorization or requirement; or 6, national security.

Follow-on Awards - In addition to the categories of competitive and noncompetitive awards, NASA awarded \$1,314.5 million in follow-ons to competitive procurements, of which \$500 thousand, represented new awards and \$1,314.0 million were modifications to existing contracts awarded in prior years.

COMPETITION IN NASA AWARDS

FISCAL YEAR 1993



| | (Millions) | (Percent) |
|--|--------------------------|---------------------|
| <u>Total Available for Competition **</u> | <u>\$10,649.1</u> | <u>100.0</u> |
| <u>Competed</u> | <u>8,635.6</u> | <u>81.1</u> |
| <u>New Awards</u> | <u>766.7</u> | <u>7.2</u> |
| Sealed Bids | 144.1 | 1.4 |
| Negotiated | 622.6 | 5.8 |
| <u>Modifications</u> | <u>7,868.9</u> | <u>73.9</u> |
| Sealed Bids | 66.7 | .6 |
| Negotiated | 7,802.2 | 73.3 |
| <u>Not Competed</u> | <u>699.0</u> | <u>6.6</u> |
| New Awards | 241.4 | 2.3 |
| Modifications | 457.6 | 4.3 |
| <u>Follow-on</u> | <u>1,314.5</u> | <u>12.3</u> |
| New Awards | .5 | * |
| Modifications | 1,314.0 | 12.3 |

* Less than .05 percent.

** The \$10,649.1 million does not include \$2,511.3 million in awards which were not available for competition.

Figure 2

IV. AWARDS TO BUSINESS FIRMS

A. Awards By Contract Type

Fiscal Year 1993 - Figure 3 categorizes Fiscal Year 1993 awards over \$25,000 to business firms by contract type.

Contracts and modifications to contracts having cost-plus-award-fee provisions with business firms accounted for 76 percent of the total dollars in Fiscal Year 1993, as compared to 75 percent in Fiscal Year 1992. Incentive contracts, both cost-plus and fixed-price, were 3 percent of the total dollars in Fiscal Year 1993, compared to 4 percent in Fiscal Year 1992. Firm-fixed-price contracts amounted to 9 percent of the total, and cost-plus-fixed-fee contracts represented 9 percent of the total in Fiscal Year 1993.

Trends, Fiscal Years 1989 - 1993 - The following table shows a 5-year trend in dollars and percent of total annual procurements to business firms by contract type. The large percentage of procurements which have award fee and incentive provisions resulted from major procurements for the Space Shuttle program. The increase in the percentage of award fee dollars in Fiscal Years 1989 through 1991 is primarily because of the award of major space station contracts. The decrease in the percentage of incentive fee contract dollars from Fiscal Year 1990 to Fiscal Year 1991 was a result of changing from the use of a cost-plus-incentive-fee to a cost-plus-award-fee contract for the procurement of the redesigned solid rocket motors for the space shuttle.

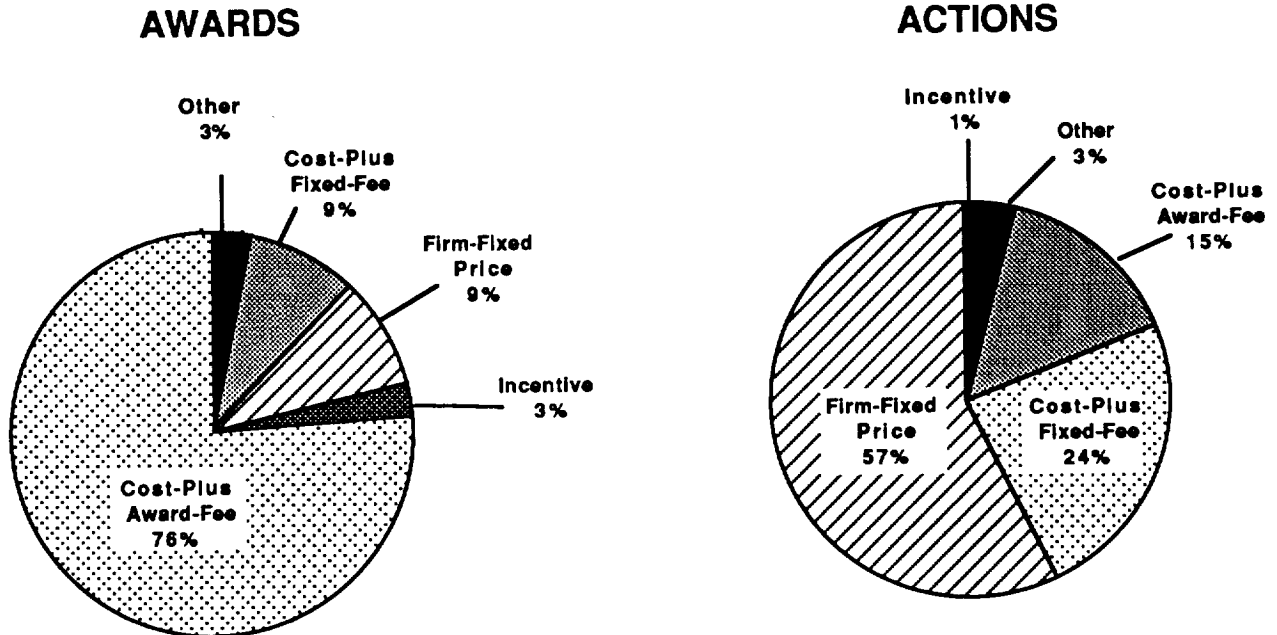
AWARDS TO BUSINESS FIRMS BY CONTRACT TYPE* FISCAL YEAR 1989 - 1993

| | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 |
|---------------------------|----------------|----------------|-----------------|-----------------|-----------------|
| <u>AWARDS IN MILLIONS</u> | | | | | |
| <u>TOTAL BUSINESS</u> | <u>\$8,329</u> | <u>\$9,843</u> | <u>\$10,149</u> | <u>\$10,419</u> | <u>\$10,223</u> |
| FIRM-FIXED-PRICE | 765 | 952 | 980 | 1,058 | 893 |
| INCENTIVE | 1,454 | 1,444 | 362 | 371 | 256 |
| COST-PLUS-AWARD-FEE | 5,190 | 6,478 | 7,693 | 7,865 | 7,771 |
| COST-PLUS-FIXED-FEE | 823 | 827 | 811 | 740 | 965 |
| OTHER | 97 | 142 | 303 | 385 | 338 |
| <u>PERCENT OF TOTAL</u> | | | | | |
| <u>TOTAL BUSINESS</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| FIRM-FIXED-PRICE | 9 | 10 | 10 | 10 | 9 |
| INCENTIVE | 18 | 15 | 3 | 4 | 3 |
| COST-PLUS-AWARD-FEE | 62 | 66 | 76 | 75 | 76 |
| COST-PLUS-FIXED-FEE | 10 | 8 | 8 | 7 | 9 |
| OTHER | 1 | 1 | 3 | 4 | 3 |

*Excludes smaller procurements, generally those of \$25,000 or less.

AWARDS BY CONTRACT TYPE DIRECT AWARDS TO BUSINESS FIRMS*

FISCAL YEAR 1993



| | (Millions) | Actions |
|-----------------------------|-------------------|---------------|
| Total | \$10,222.6 | 17,491 |
| <u>Firm-Fixed-Price</u> | <u>893.2</u> | <u>9,974</u> |
| <u>Incentive</u> | <u>256.2</u> | <u>140</u> |
| Fixed-Price-Incentive | 25.2 | 39 |
| Cost-Plus-Incentive-Fee | 231.0 | 101 |
| <u>Cost-Plus-Award -Fee</u> | <u>7,770.5</u> | <u>2,565</u> |
| <u>Cost-Plus-Fixed-Fee</u> | <u>964.8</u> | <u>4,195</u> |
| <u>Other</u> | <u>337.9</u> | <u>617</u> |
| Fixed-Price-Redetermination | 2.7 | 40 |
| Economic Price Adjustment | 51.1 | 39 |
| Cost-No-Fee | 237.1 | 196 |
| Cost-Sharing | 33.9 | 103 |
| Labor-Hour | .6 | 20 |
| Time and Material | 12.5 | 219 |

* Excludes smaller procurements, generally those of \$25,000 or less and orders under GSA Federal Supply Schedule contracts.

Figure 3

B. Small Business Participation

Total Small Business - During Fiscal Year 1993, NASA direct awards to small business firms exceeded \$1 billion, totalling \$1,060.7 million. These awards constituted 10 percent of the total awards to business firms. The dollar awards to small business firms in Fiscal Year 1993 resulted from 67 thousand procurement actions, or 72 percent of the total number of actions placed with business firms (See Figure 4).

Share of New Contracts - The majority of NASA's direct awards to business firms involve large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$831.3 million to business firms during Fiscal Year 1993, small business firms received \$284.7 million, or 34.2 percent.

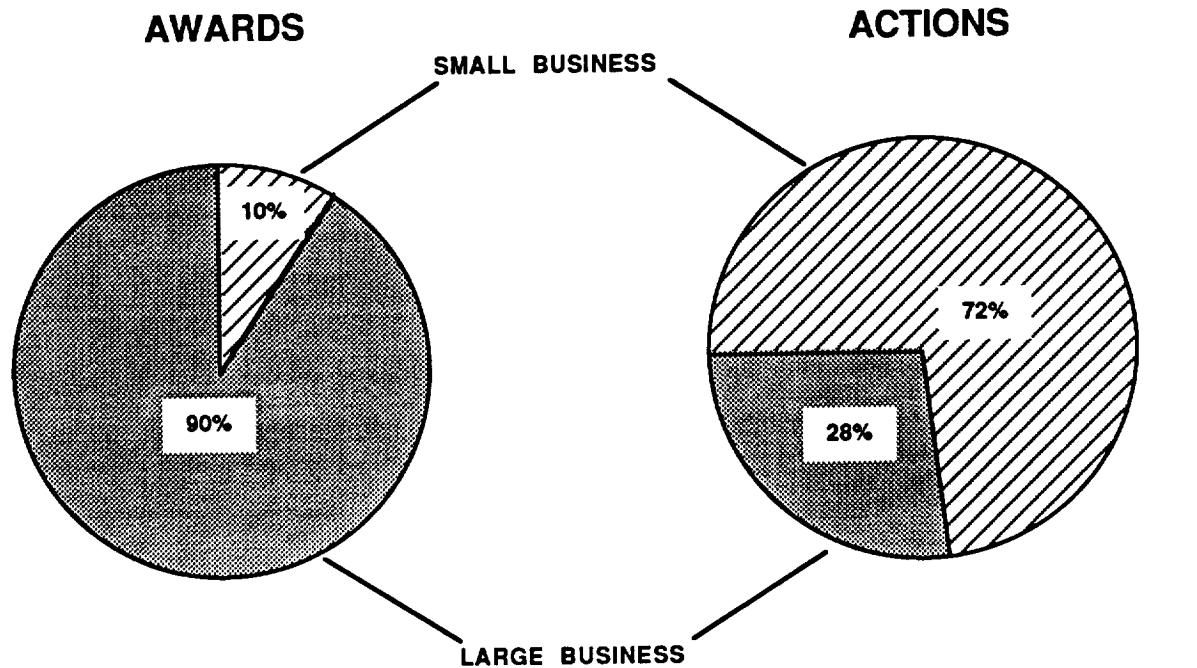
Share of Smaller Awards - Awards of \$25,000 or less to business firms during Fiscal Year 1993 totalled \$218.0 million. Of these smaller awards, small business firms received \$135.2 million, or 62 percent.

Extent of Maximum Possible Participation in New Awards - Assuming that the smaller awards represented new purchases, the total amount of new business awards in which small business could have participated was \$1,049.3 million, consisting of the \$831.3 million in new awards over \$25,000 and the \$218.0 million in awards of \$25,000 or less. Of this \$1,049.3 million in new business awards, small business received \$419.9 million, or 40 percent.

Small Business Set-Asides - Small business set-asides are defined as competitive awards which are limited only to small business. The small business set-aside program continues to exert a strong influence on the capability of small business firms to participate in the space program. In Fiscal Year 1993, these set-asides amounted to \$315.1 million, representing 30 percent of the total awards to small business and 3 percent of the total awards to all business firms.

SMALL BUSINESS PARTICIPATION

FISCAL YEAR 1993



| | <u>(Millions)</u> |
|----------------|-------------------|
| <u>Total</u> | <u>\$10,497.9</u> |
| Small Business | 1,060.7* |
| Large Business | 9,437.2 |

| | <u>(Thousands)</u> |
|----------------|--------------------|
| <u>Total</u> | <u>92.8</u> |
| Small Business | 67.2 |
| Large Business | 25.6 |

* Includes \$264.8 million awarded to small minority firms under Authority of Section 8(a) of the Small Business Act. Also includes \$86.0 million awarded through the Small Business Innovation Research Program.

Figure 4

Small Business Innovation Research - The Small Business Innovation Development Act of 1982, P.L. 97-219, mandated that Federal agencies, whose extramural budgets for research or research and development exceeded a stated threshold, establish a Small Business Innovation Research Program. Statutory requirements are aimed at assisting small/small disadvantaged business participation in the objectives of the program: to stimulate technological innovation in the private sector; to strengthen the role of small business in meeting Federal research and development needs; to increase the commercialization of innovations derived from Federal research and development; and to encourage small disadvantaged business participation in technological innovation. During Fiscal Year 1993, NASA awarded 496 new SBIR contracts totalling \$51.3 million. Of this amount, 346 were Phase I awards totalling \$17.1 million and 150 were Phase II awards totalling \$34.2 million. Also in Fiscal Year 1993, NASA funded on-going Phase II contracts totalling \$34.7 million. Included in the total awards of \$86.0 million, 77 contracts, or \$9.9 million, are to small disadvantaged business firms and 42 contracts, or \$5.6 million are to women-owned firms.

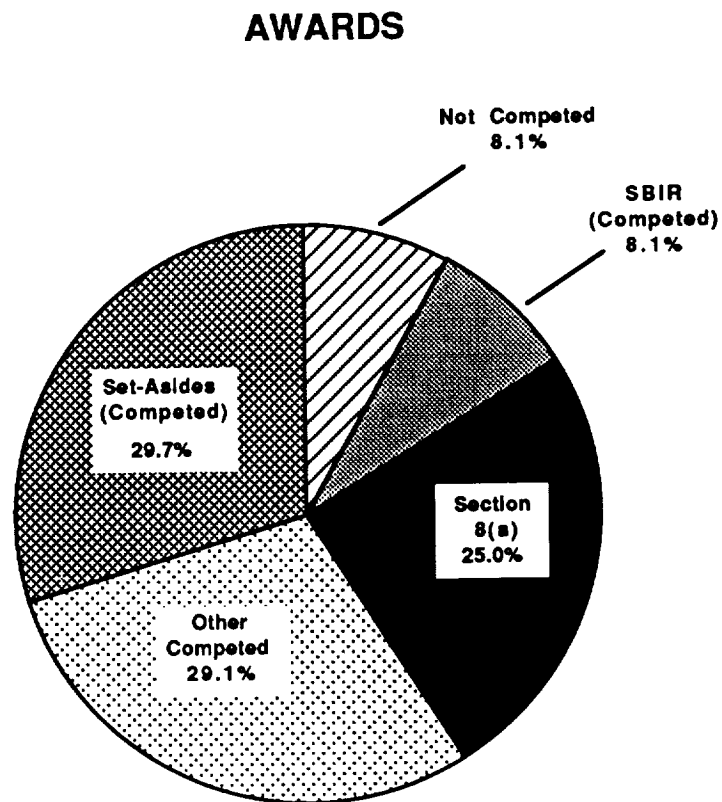
Representation Among NASA's 100 Largest Contractors - The 100 contractors that received the largest dollar value of NASA's direct awards to business firms are listed on Pages 22-26. Eighteen of these contractors are small business firms and twelve are disadvantaged firms.

C. Distribution of Small Business Awards

In addition to the \$315.1 million in small business set-asides and the \$86.0 million awarded through the Small Business Innovation Research Program, small business firms eligible for participation in the Section 8(a) Program received a total of \$264.8 million in such awards. Also, small business firms received \$308.7 million in other competitive awards and \$86.1 million in procurement awards which were not competed (See Figure 5).

DISTRIBUTION OF SMALL BUSINESS AWARDS

FISCAL YEAR 1993



| | (Millions) |
|-----------------------------|------------------|
| <u>Total Small Business</u> | <u>\$1,060.7</u> |
| Set-Asides | 315.1 |
| Section 8(a) | 264.8 |
| SBIR | 86.0 |
| Other Competed | 308.7 |
| Not Competed | 86.1 |

Figure 5

Trend, Fiscal Years 1989 - 1993 - Prime Contract Awards. The table below shows the extent of small business participation in NASA's procurements for the period Fiscal Years 1989 - 1993.

SMALL BUSINESS PARTICIPATION
FISCAL YEARS 1989 - 1993
(MILLIONS OF DOLLARS)

| | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 |
|------------------------|----------------|-----------------|-----------------|-----------------|-----------------|
| <u>TOTAL BUSINESS</u> | <u>\$8,568</u> | <u>\$10,072</u> | <u>\$10,417</u> | <u>\$10,717</u> | <u>\$10,497</u> |
| <u>SMALL BUSINESS*</u> | <u>\$857</u> | <u>\$924</u> | <u>\$968</u> | <u>\$1,011</u> | <u>\$1,060</u> |
| % OF TOTAL | 10.0% | 9.2% | 9.3% | 9.4% | 10.1% |
| <u>SET-ASIDES</u> | <u>\$323</u> | <u>\$307</u> | <u>\$324</u> | <u>\$275</u> | <u>\$315</u> |
| % OF TOTAL | 3.8% | 3.1% | 3.1% | 2.6% | 3.0% |
| % OF SMALL | 37.6% | 33.2% | 33.5% | 27.2% | 29.7% |

*Includes awards placed under Authority of Section 8(a) of the Small Business Act and through the Small Business Innovation Research Program.

Appendix III shows NASA direct awards to small business firms for the period Fiscal Years 1961-1993 (See Page 50).

D. Small Disadvantaged Business Participation

NASA's prime contracts with small disadvantaged business firms in awarding procurements during Fiscal Year 1993 totalled \$333.5 million. The tabulation shown below indicates that NASA has made continuing efforts to increase disadvantaged business participation in NASA's procurements through direct awards and awards placed under the provisions of Section 8(a) of the Small Business Act. Support service contract awards have also been expanded to a variety of technical services and research and development efforts as well as other services. Awards subcontracted to small disadvantaged business firms were not available at the time of publication.

Public Laws 101-144 and 101-507 mandated that NASA establish a goal of awarding at least 8 percent of the value of its prime and subcontracts to small disadvantaged business firms, Historically Black Colleges and Universities and other minority institutions. NASA developed a plan for achieving the prescribed goal by Fiscal Year 1994. In Fiscal Year 1993, NASA reached the 8 percent goal by awarding 8.5 percent of its prime and subcontract dollars to small disadvantaged firms, Historically Black Colleges and Universities and other minority institutions.

SMALL DISADVANTAGED
BUSINESS PRIME CONTRACT AWARDS
FISCAL YEARS 1989 - 1993
(MILLIONS OF DOLLARS)

| Fiscal Year | Total Awards To Disadvantaged Business | Direct Awards* | Section 8(a) Awards |
|-------------|---|-------------------|------------------------|
| 1993 | \$333.5 | \$68.7 | \$264.8 |
| 1992 | 280.5 | 48.4 | 232.1 |
| 1991 | 295.8 | 70.2 | 225.6 |
| 1990 | 293.7 | 81.0 | 212.7 |
| 1989 | 275.0 | 90.3 | 184.7 |

*Includes disadvantaged direct awards through the Small Business Innovation Research Program. Excludes orders against federal supply contracts.

E. Women-Owned Small Business Participation

In accordance with Executive Order 12138, Women's Business Enterprise, NASA extends a particular effort to ensure that business firms owned and controlled by women have an equitable opportunity to participate in NASA's Procurement Program. In Fiscal Year 1993, women-owned small business firms received prime contract awards totalling \$111.0 million.

F. Labor Surplus Preference

It is NASA policy to assist labor surplus area concerns to an extent consistent with procurement objectives and regulations. NASA awards set-aside procurements which ensure that a significant part of the work will be performed in designated labor surplus areas. During Fiscal Year 1993, labor surplus area preference awards totalled \$11.0 million.

G. Awards by Type of Effort

During Fiscal Year 1993, \$10,279.9 million was awarded to business firms in support of effort in research and development, services, and supplies and equipment procurements. A breakout of these awards by category is shown below:

| <u>Category</u> | <u>Number of Contracts</u> | <u>Total (Millions)</u> |
|--|------------------------------------|-----------------------------|
| <u>Total</u> | <u>5,685</u> | <u>\$10,279.9*</u> |
| <u>Research & Development</u> | <u>1,983</u> | <u>3,233.0</u> |
| Aeronautics & Space Technology | 688 | 1,017.5 |
| Space Flight | 125 | 643.9 |
| Space Station | 19 | 518.5 |
| Space Science & Applications | 562 | 390.1 |
| Space Operations | 46 | 259.9 |
| Commercial Programs | 47 | 18.1 |
| Other Space R&D | 416 | 361.3 |
| Other R&D | 80 | 23.7 |
| <u>Services</u> | <u>1,635</u> | <u>4,295.2</u> |
| Professional, Admin. & Mgmt. Support | 278 | 1,315.9 |
| Maint., Repair & Rebuildg. of Equip. | 162 | 1,061.6 |
| ADP & Telecommunication | 157 | 460.8 |
| Operation of Gov't-owned Facilities | 53 | 414.0 |
| Constr. of Structures & Facilities | 154 | 279.9 |
| Utilities and Housekeeping | 90 | 227.3 |
| Maint., Repair, Alter. of Real Prop. | 378 | 168.6 |
| Other Services | 363 | 367.1 |
| <u>Supplies & Equipment</u> | <u>2,067</u> | <u>2,751.7</u> |
| Space Vehicles | 47 | 1,396.9 |
| Engines, Turbines & Components | 12 | 751.4 |
| Ammunition & Explosives | 11 | 272.2 |
| ADP Equipment, Software, Supplies & Support Equipment | 912 | 197.4 |
| Instruments & Laboratory Equipment | 399 | 26.7 |
| Fuels, Lubricants, Oils & Waxes | 21 | 19.7 |
| Communication, Detection & Coherent Radiation Equipment | 108 | 12.8 |
| Electrical/Electronic Equip. Components | 57 | 11.3 |
| Other Supplies & Equipment | 500 | 63.3 |

*Excludes smaller procurements, generally those of \$25,000 of less.

H. One Hundred Principal Contractors (Business Firms)

The one hundred contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 1993 are shown below. The awards to these contractors accounted for 89 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of \$8.1 million. Of the one hundred contractors, 18 were small business firms and 12 were disadvantaged firms at the time of award.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
ACCORDING TO TOTAL AWARDS RECEIVED
FISCAL YEAR 1993

(S=Small Business/D=Disadvantaged Business)

| CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE | AWARDS (THOUSANDS) | PERCENT |
|--|-----------------------|---------------|
| <u>TOTAL AWARDS TO BUSINESS FIRMS</u> | <u>\$10,497,912</u> | <u>100.00</u> |
| 1. ROCKWELL INTERNATIONAL CORP Canoga Park, CA | 1,491,394 | 14.21 |
| 2. MCDONNELL DOUGLAS CORP Huntington Beach, CA | 996,765 | 9.49 |
| 3. LOCKHEED SPACE OPERATIONS CO Kennedy Space Center, FL | 589,888 | 5.62 |
| 4. BOEING CO Marshall Space Flight, AL | 502,005 | 4.78 |
| 5. THIOKOL CORP Brigham City, UT | 478,842 | 4.56 |
| 6. LOCKHEED MISSILES & SPACE CO Marshall Space Flight, AL | 429,548 | 4.09 |
| 7. ROCKWELL SPACE OPERATIONS INC Houston, TX | 351,155 | 3.34 |
| 8. MARTIN MARIETTA CORP New Orleans, LA | 324,583 | 3.09 |
| 9. GENERAL ELECTRIC CO Princeton, NJ | 286,393 | 2.73 |
| 10. LOCKHEED ENGRG & SCIENCE CO Houston, TX | 256,247 | 2.44 |
| 11. ALLIEDSIGNAL TECHNICAL SERV Greenbelt, MD | 231,412 | 2.20 |
| 12. E G & G FLORIDA INC Kennedy Space Center, FL | 221,435 | 2.11 |
| 13. T R W INC Redondo Beach, CA | 217,706 | 2.07 |
| 14. COMPUTER SCIENCES CORP Greenbelt, MD | 194,588 | 1.85 |
| 15. U S B I BOOSTER PRODUCTION CO Huntsville, AL | 177,287 | 1.69 |
| 16. GRUMMAN AEROSPACE CORP Reston, VA | 162,895 | 1.55 |

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED (CONT'D)
 FISCAL YEAR 1993
 (S=Small Business/D=Disadvantaged Business)

| CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE | | AWARDS (THOUSANDS) | PERCENT |
|---|---|-----------------------|---------|
| 17. | BOEING COMPUTER SUPPORT SERVICES Marshall Space Flight, AL | \$155,085 | 1.48 |
| 18. | LORAL AEROSPACE CORP Houston, TX | 136,852 | 1.30 |
| 19. | SVERDRUP TECHNOLOGY INC Middleburgh Heights, OH | 106,520 | 1.01 |
| 20. | UNITED TECHNOLOGIES CORP West Palm Beach, FL | 96,540 | .92 |
| 21. | SPACE SYSTEMS LORAL INC San Jose, CA | 76,964 | .73 |
| 22. | JOHNSON CONTROLS WORLD SERV Stennis Space Center, MS | 67,057 | .64 |
| 23. | CAE LINK CORP Houston, TX | 65,485 | .62 |
| 24. | HARRIS SPACE SYSTEMS CORP Rockledge, FL | 63,130 | .60 |
| 25. | ORBITAL SCIENCES CORP Dulles, VA | 61,740 | .59 |
| 26. | STERLING FEDERAL SYSTEMS INC Moffett Field, CA | 58,025 | .55 |
| 27. | BAMSI INC Marshall Space Flight, AL | (D) 57,304 | .55 |
| 28. | TELEDYNE INDUSTRIES INC Marshall Space Flight, AL | 56,406 | .54 |
| 29. | INTERNATIONAL BUSINESS MACHINES Houston, TX | 54,805 | .52 |
| 30. | G T E GOVERNMENT SYSTEMS CORP Gaithersburg, MD | 54,414 | .52 |
| 31. | HUGHES APPLIED INFO SYS INC Greenbelt, MD | 52,795 | .50 |
| 32. | SPACEHAB INC Washington, DC | (S) 49,808 | .47 |
| 33. | SANTA BARBARA RESEARCH CENTER Goleta, CA | 47,559 | .45 |
| 34. | CRAY RESEARCH INC Chippewa Falls, WI | 47,105 | .45 |
| 35. | BALL CORP Boulder, CO | 46,479 | .44 |
| 36. | BIONETICS CORP Marshall Space Flight, AL | 45,679 | .44 |
| 37. | RAYTHEON SERVICE CO Annapolis Junction, MD | 44,202 | .42 |
| 38. | N S I TECHNOLOGY SERVICES CORP Greenbelt, MD | 37,018 | .35 |

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED (CONT'D)
 FISCAL YEAR 1993
 (S=Small Business/D=Disadvantaged Business)

| CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE | | AWARDS (THOUSANDS) PERCENT | |
|---|--|----------------------------------|-----|
| 39. | P R C INC Washington, DC | \$35,282 | .34 |
| 40. | HUGHES S T X CORP Greenbelt, MD | 34,589 | .33 |
| 41. | CORTEZ III SERVICE CORP Cleveland, OH | (D) 32,135 | .31 |
| 42. | SWALES & ASSOCIATES INC Greenbelt, MD | (S) 29,861 | .28 |
| 43. | CALSPAN CORP Moffett Field, CA | 28,432 | .27 |
| 44. | KRUG LIFE SCIENCES INC Houston, TX | 27,778 | .26 |
| 45. | SCIENCE APPLICATION INTL CORP San Diego, CA | 26,847 | .26 |
| 46. | GENERAL ELECTRIC U T C JV Evendale, OH | 25,070 | .24 |
| 47. | MARTIN MARIETTA SERVICES Houston, TX | 23,588 | .22 |
| 48. | GENERAL DYNAMICS CORP San Diego, CA | 22,817 | .22 |
| 49. | UNISYS GOVERNMENT SYSTEMS INC Hampton, VA | 22,652 | .22 |
| 50. | JACKSON & TULL INC Greenbelt, MD | (S) (D) 22,494 | .21 |
| 51. | ANALEX CORP Fairview Park, OH | 20,890 | .20 |
| 52. | FAIRCHILD SPACE & DEF CORP Greenbelt, MD | 20,351 | .19 |
| 53. | JOHNSON ENGINEERING CORP Houston, TX | (S) 20,184 | .19 |
| 54. | R M S TECHNOLOGIES INC Cleveland, OH | (D) 19,974 | .19 |
| 55. | PARAMAX SYSTEMS CORP Greenbelt, MD | 19,943 | .19 |
| 56. | SILICON GRAPHICS INC Mountain View, CA | 19,677 | .19 |
| 57. | NORTHROP WORLDWIDE AIRCRAFT Houston, TX | 19,434 | .19 |
| 58. | HUGHES AIRCRAFT CO El Segundo, CA | 19,246 | .18 |
| 59. | I NET INC Kennedy Space Center, FL | (S) (D) 18,517 | .18 |
| 60. | AIR PRODUCTS & CHEMICALS INC Allentown, PA | 18,164 | .17 |

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED (CONT'D)
 FISCAL YEAR 1993
 (S=Small Business/D=Disadvantaged Business)

| CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE | | AWARDS (THOUSANDS) | PERCENT |
|---|--|-----------------------|---------|
| 61. | AEROJET GENERAL CORP Azusa, CA | \$17,807 | .17 |
| 62. | MICRO CRAFT INC Hampton, VA | (S) 17,633 | .17 |
| 63. | OGDEN LOGISTICS SERVICES Greenbelt, MD | 17,223 | .16 |
| 64. | METRIC CONSTRUCTORS INC Kennedy Space Center, FL | 17,205 | .16 |
| 65. | LOCKHEED CORP Burbank, CA | 15,234 | .15 |
| 66. | FERGUSON M K CO Cleveland, OH | 14,226 | .14 |
| 67. | CRAY GRUMMAN SYSTEMS Marshall Space Flight, AL | 14,210 | .14 |
| 68. | GOVERNMENT MICRO RESOURCES Chantilly, VA | (S) (D) 13,266 | .13 |
| 69. | DIGITAL EQUIPMENT CORP Moffett Field, CA | 13,169 | .13 |
| 70. | VIRGINIA ELECTRIC & POWER CO Hampton, VA | 12,714 | .12 |
| 71. | BLAKE CONSTRUCTION CO Greenbelt, MD | 12,627 | .12 |
| 72. | CLEVELAND ELECTRIC ILLUMINATING Cleveland, OH | 12,123 | .12 |
| 73. | B D M INTERNATIONAL INC Washington, DC | 11,988 | .11 |
| 74. | FAIRCHILD INDUSTRIES INC Germantown, MD | 11,950 | .11 |
| 75. | HERNANDEZ ENGINEERING INC Houston, TX | (S) (D) 11,322 | .11 |
| 76. | WYLE LABORATORIES Hampton, VA | 11,130 | .11 |
| 77. | ANSTEC INC Greenbelt, MD | (S) (D) 10,812 | .10 |
| 78. | SCIENCE SYSTEMS APPLICATIONS Lanham, MD | (S) 10,422 | .10 |
| 79. | RECOM TECHNOLOGIES INC Moffett Field, CA | (S) (D) 10,268 | .10 |
| 80. | R M S ASSOCIATES INC JV Linthicum, MD | 9,894 | .09 |
| 81. | DUNN CONSTRUCTION CO INC Stennis Space Center, MS | 9,767 | .09 |

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO TOTAL AWARDS RECEIVED (CONT'D)
 FISCAL YEAR 1993
 (S=Small Business/D=Disadvantaged Business)

| CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE | | AWARDS | |
|---|--|---------------|---------|
| | | (THOUSANDS) | PERCENT |
| 82. | BOOZ ALLEN & HAMILTON INC Bethesda, MD | \$9,732 | .09 |
| 83. | FEDERAL DATA CORP Greenbelt, MD | (S) 9,553 | .09 |
| 84. | HAMM E L & ASSOCIATES INC Greenbelt, MD | (S) (D) 9,514 | .09 |
| 85. | MASON & HANGER SERVICES INC Hampton, VA | 9,435 | .09 |
| 86. | AEROSPACE DESIGN & FAB INC Brook Park, OH | (S) 9,387 | .09 |
| 87. | PACIFICORP CAPITAL INC Houston, TX | 9,337 | .09 |
| 88. | E E R SYSTEMS CORP Beltsville, MD | (S) (D) 9,301 | .09 |
| 89. | QUAD S CO Moffett Field, CA | (S) 9,249 | .09 |
| 90. | ANALYTICAL SERVICES & MAT INC Hampton, VA | (S) (D) 9,184 | .09 |
| 91. | VITRO CORP Washington, DC | 9,128 | .09 |
| 92. | SPACE TRANSPORTATION PRO TEAM Huntsville, AL | 9,028 | .09 |
| 93. | LORAL VOUGHT SYSTEMS CORP Dallas, TX | 8,939 | .09 |
| 94. | TAFT BROADCASTING CO HOUSTON Houston, TX | (S) 8,800 | .08 |
| 95. | KELSEY SEYBOLD MEDICAL GROUP Houston, TX | 8,457 | .08 |
| 96. | BOEING AEROSPACE OPERATIONS INC Moffett Field, CA | 8,413 | .08 |
| 97. | COMPUTER SCIENCES DIST INFO Slidell, LA | 8,389 | .08 |
| 98. | CONVEX COMPUTER CORP Richardson, TX | 8,246 | .08 |
| 99. | CENTENNIAL CONTRACTORS ENTPR Greenbelt, MD | 8,229 | .08 |
| 100. | SCOTT CO CALIF Moffett Field, CA | 8,179 | .08 |
| | OTHER* | 1,131,382 | 10.77 |

*Includes other awards over \$25,000 and smaller procurements of \$25,000 or less.

V. AWARDS TO EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS*

A. Distribution by Type of Institution and Award

During Fiscal Year 1993, \$1,044.4 million was awarded to educational and other nonprofit institutions. Of this amount, \$707.8 million was awarded to educational institutions and \$336.6 million to other nonprofit organizations. A breakout of these awards between contracts, grants and agreements is shown below:

| Type of Award | Total (Millions) | Educational Institutions (Millions) | Nonprofit Organizations (Millions) |
|---------------|---------------------|---|--|
| <u>Total</u> | <u>\$1,044.4</u> | <u>\$707.8*</u> | <u>\$336.6</u> |
| Contracts | 422.2 | 218.1 | 204.1 |
| Grants | 523.7 | 419.1 | 104.6 |
| Agreements | 98.5 | 70.6 | 27.9 |

*Excludes JPL.

B. One Hundred Principal Educational & Nonprofit Institutions*

The one hundred educational and nonprofit institutions that received the largest dollar value of NASA awards during Fiscal Year 1993 are shown on Pages 28-32.

The awards to these institutions accounted for 87 percent of the total awards to educational and nonprofit institutions during the period. Seventy-seven of the top 100 were educational institutions; 23 were nonprofit organizations.

*Excludes JPL.

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED*
FISCAL YEAR 1993
(N=Nonprofit Institution)

| INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE | | AWARDS | |
|---|---|--------------------|----------------|
| | | <u>(THOUSANDS)</u> | <u>PERCENT</u> |
| <u>TOTAL AWARDS TO EDUCATIONAL & NONPROFIT INSTITUTIONS</u> | | <u>\$1,044,465</u> | <u>100.00</u> |
| 1. | STANFORD UNIV Stanford, CA | 55,897 | 5.35 |
| 2. | ASSN UNIV RESEARCH & ASTRON (N) Baltimore, MD | 54,795 | 5.25 |
| 3. | SMITHSONIAN INSTITUTION (N) Cambridge, MA | 42,233 | 4.04 |
| 4. | MASS INSTITUTE TECHNOLOGY Cambridge, MA | 39,165 | 3.75 |
| 5. | UNIVERSITIES SPACE RESEARCH (N) Greenbelt, MD | 31,035 | 2.97 |
| 6. | UNIV TENNESSEE CALSPAN CSTAR (N) Tullahoma, TN | 23,817 | 2.28 |
| 7. | WHEELING JESUIT COLLEGE Wheeling, WV | 23,559 | 2.26 |
| 8. | UNIV CALIF BERKELEY Berkeley, CA | 22,853 | 2.19 |
| 9. | NEW MEXICO STATE UNIV LAS CRUCES Palestine, TX | 21,749 | 2.08 |
| 10. | UNIV ARIZONA Tucson, AZ | 21,718 | 2.08 |
| 11. | MITRE CORP (N) Houston, TX | 21,543 | 2.06 |
| 12. | UNIV ALASKA FAIRBANKS Fairbanks, AK | 20,063 | 1.92 |
| 13. | CHRISTOPHER COLUMBUS CTR DEV (N) Baltimore, MD | 20,000 | 1.92 |
| 14. | C I E S I N (N) Ann Arbor, MI | 18,975 | 1.82 |
| 15. | UNIV MARYLAND COLLEGE PARK College Park, MD | 17,643 | 1.69 |
| 16. | UNIV COLORADO BOULDER Boulder, CO | 17,285 | 1.66 |
| 17. | CHARLES STARK DRAPER LAB INC (N) Cambridge, MA | 16,723 | 1.60 |
| 18. | UNIV CALIF SAN DIEGO La Jolla, CA | 16,307 | 1.56 |
| 19. | NATIONAL ACADEMY SCIENCES (N) Washington, DC | 15,767 | 1.51 |
| 20. | UNIV ALABAMA HUNTSVILLE Huntsville, AL | 14,939 | 1.43 |

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED* (CONT'D)
FISCAL YEAR 1993
(N=Nonprofit Institution)

| INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE | | AWARDS (THOUSANDS) | PERCENT |
|---|---|-----------------------|---------|
| 21. | CALIF INSTITUTE TECHNOLOGY Pasadena, CA | \$14,111 | 1.35 |
| 22. | PENNSYLVANIA STATE UNIV UP University Park, PA | 13,619 | 1.31 |
| 23. | UNIV MICHIGAN ANN ARBOR Ann Arbor, MI | 11,353 | 1.09 |
| 24. | UNIV WISCONSIN MADISON Madison, WI | 11,099 | 1.06 |
| 25. | UNIV NEW HAMPSHIRE Durham, NH | 10,463 | 1.00 |
| 26. | WEST VIRGINIA UNIV Morgantown, WV | 10,395 | 1.00 |
| 27. | JOHNS HOPKINS UNIV Baltimore, MD | 10,235 | .98 |
| 28. | UNIV TEXAS AUSTIN Austin, TX | 9,687 | .93 |
| 29. | UNIV WASHINGTON Seattle, WA | 9,612 | .92 |
| 30. | UNIV HAWAII Honolulu, HI | 9,353 | .90 |
| 31. | UNIV CALIF LOS ANGELES Los Angeles, CA | 9,086 | .87 |
| 32. | UNIV VIRGINIA Charlottesville, VA | 8,526 | .82 |
| 33. | CORNELL UNIV Ithaca, NY | 8,035 | .77 |
| 34. | SOUTHWEST RESEARCH INSTITUTE San Antonio, TX | (N) 7,685 | .74 |
| 35. | OHIO AEROSPACE INSTITUTE Brookpark, OH | (N) 7,676 | .74 |
| 36. | S E T I INSTITUTE Moffett Field, CA | (N) 7,664 | .73 |
| 37. | GEORGIA INSTITUTE TECHNOLOGY Atlanta, GA | 7,491 | .72 |
| 38. | SAN JOSE STATE UNIV Moffett Field, CA | 7,190 | .69 |
| 39. | OKLAHOMA STATE UNIV Stillwater, OK | 7,125 | .68 |
| 40. | BATTELLE MEMORIAL INSTITUTE Columbus, OH | (N) 7,063 | .68 |
| 41. | UNIV HOUSTON Houston, TX | 6,847 | .66 |

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED* (CONT'D)
FISCAL YEAR 1993
(N=Nonprofit Institution)

| INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE | | AWARDS (THOUSANDS) | PERCENT |
|---|--|-----------------------|---------|
| 42. | COLUMBIA UNIV New York, NY | \$6,730 | .64 |
| 43. | CASE WESTERN RESERVE UNIV Cleveland, OH | 6,711 | .64 |
| 44. | TEXAS A & M UNIV College Station, TX | 6,567 | .63 |
| 45. | HARVARD UNIV Cambridge, MA | 6,526 | .63 |
| 46. | UNIV CHICAGO Chicago, IL | 6,436 | .62 |
| 47. | UNIV HOUSTON CLEAR LAKE Houston, TX | 5,930 | .57 |
| 48. | UNIV IOWA Iowa City, IA | 5,485 | .53 |
| 49. | OLD DOMINION UNIV Norfolk, VA | 5,364 | .51 |
| 50. | UNIV SOUTHERN CALIF Los Angeles, CA | 4,739 | .45 |
| 51. | UNIV ALABAMA BIRMINGHAM Birmingham, AL | 4,623 | .44 |
| 52. | UNIV FLORIDA Gainesville, FL | 4,572 | .44 |
| 53. | OHIO STATE UNIV Columbus, OH | 4,538 | .43 |
| 54. | FLORIDA ATLANTIC UNIV Tampa, FL | 4,517 | .43 |
| 55. | VIRGINIA POLYTECHNIC INSTITUTE Blacksburg, VA | 4,413 | .42 |
| 56. | PRINCETON UNIV Princeton, NJ | 4,404 | .42 |
| 57. | UNIV CALIF SANTA BARBARA Santa Barbara, CA | 4,098 | .39 |
| 58. | WASHINGTON UNIV ST LOUIS St. Louis, MO | 4,053 | .39 |
| 59. | CARNEGIE MELLON UNIV Pittsburgh, PA | 4,011 | .38 |
| 60. | KANSAS COSMOSPHERE & SPACE Hutchinson, KS | (N) 3,940 | .38 |
| 61. | UNIV NEW MEXICO Albuquerque, NM | 3,917 | .38 |
| 62. | AUBURN UNIV AUBURN Auburn, AL | 3,762 | .36 |

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED* (CONT'D)
FISCAL YEAR 1993
(N=Nonprofit Institution)

| INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE | | AWARDS | |
|---|---|--------------------|----------------|
| | | <u>(THOUSANDS)</u> | <u>PERCENT</u> |
| 63. | UNIV MINNESOTA MINNPL ST PAUL Minneapolis, MN | \$3,743 | .36 |
| 64. | HOWARD UNIV Washington, DC | 3,632 | .35 |
| 65. | HAMPTON CITY (N) Hampton, VA | 3,511 | .34 |
| 66. | OREGON STATE UNIV Corvallis, OR | 3,299 | .32 |
| 67. | FLORIDA A & M UNIV Tallahassee, FL | 3,283 | .31 |
| 68. | AMERICAN INSTIT AERO & ASTRO (N) New York, NY | 3,259 | .31 |
| 69. | UNIV ILLINOIS URBANA Urbana, IL | 3,254 | .31 |
| 70. | NORTH CAROLINA STATE UNIV Raleigh, NC | 3,170 | .30 |
| 71. | GEORGE WASHINGTON UNIV Washington, DC | 3,081 | .30 |
| 72. | CLEVELAND STATE UNIV Cleveland, OH | 3,007 | .29 |
| 73. | PURDUE UNIV West Lafayette, IN | 3,006 | .29 |
| 74. | COLORADO STATE UNIV Fort Collins, CO | 2,791 | .27 |
| 75. | UNIV MIAMI Miami, FL | 2,743 | .26 |
| 76. | RESEARCH TRIANGLE INSTITUTE (N) Research Triangle Park, NC | 2,690 | .26 |
| 77. | CLARK ATLANTA UNIV Atlanta, GA | 2,660 | .25 |
| 78. | ELORET INSTITUTE (N) Moffett Field, CA | 2,634 | .25 |
| 79. | VANDERBILT UNIV Nashville, TN | 2,634 | .25 |
| 80. | HAMPTON UNIV Hampton, VA | 2,565 | .25 |
| 81. | RICE UNIV Houston, TX | 2,519 | .24 |
| 82. | NORTH CAROLINA A & T STATE UNIV Greensboro, NC | 2,498 | .24 |
| 83. | ENVIRONMENTAL RES INSTIT MICH (N) Ann Arbor, MI | 2,392 | .23 |

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO TOTAL AWARDS RECEIVED* (CONT'D)
FISCAL YEAR 1993
(N=Nonprofit Institution)

| INSTITUTION & PRINCIPAL PLACE OF PERFORMANCE | | AWARDS | |
|---|--|-------------|---------|
| | | (THOUSANDS) | PERCENT |
| 84. | ARIZONA STATE UNIV Tempe, AZ | \$2,333 | .22 |
| 85. | UNIV CINCINNATI Cincinnati, OH | 2,331 | .22 |
| 86. | RENSSELAER POLY INST NEW YORK Troy, NY | 2,279 | .22 |
| 87. | BROWN UNIV Providence, RI | 2,248 | .22 |
| 88. | STATE UNIV NEW YORK STONY BRK Stony Brook, NY | 2,247 | .22 |
| 89. | CLARKSON UNIV Potsdam, NY | 2,131 | .20 |
| 90. | AEROSPACE CORP (N) El Segundo, CA | 2,064 | .20 |
| 91. | UNIV PITTSBURGH Pittsburgh, PA | 2,058 | .20 |
| 92. | S R I INTERNATIONAL CORP (N) Menlo Park, CA | 2,054 | .20 |
| 93. | FLORIDA STATE UNIV Tallahassee, FL | 2,051 | .20 |
| 94. | UNIV TOLEDO Toledo, OH | 2,038 | .20 |
| 95. | UNIV CALIF IRVINE Irvine, CA | 1,968 | .19 |
| 96. | UTAH STATE UNIV Logan, UT | 1,939 | .19 |
| 97. | COLLEGE WILLIAM & MARY Williamsburg, VA | 1,924 | .18 |
| 98. | UNIV CALIF RIVERSIDE Riverside, CA | 1,836 | .18 |
| 99. | MCAT INSTITUTE (N) Moffett Field, CA | 1,821 | .17 |
| 100. | INSTITUTE TECHNOLOGY DEVELOP (N) Jackson, MS | 1,787 | .17 |
| | OTHER** | 131,268 | 12.57 |

*Excludes JPL.

**Includes other awards over \$25,000 and smaller procurements of \$25,000 or less.

VI. CONTRACT FOR OPERATION OF JET PROPULSION LABORATORY

The Jet Propulsion Laboratory (JPL) is a Government-owned research and development facility, operated for NASA by the California Institute of Technology. The Laboratory carries out research programs and flight projects and conceives and executes advanced development and experimental engineering investigations to further the technology required for the Nation's space program. The primary emphasis of the Laboratory's effort is on the carrying out of unmanned lunar, planetary and deep-space scientific missions.

Net awards during Fiscal Year 1993 totalled \$1,029.8 million. Of this amount, JPL awarded \$439.0 million as subcontracts or purchases with business firms.

VII. AWARDS THROUGH OTHER GOVERNMENT AGENCIES

During Fiscal Year 1993, \$508.4 million was awarded through other Government agencies. The following table shows the distribution of these awards by agency.

AWARDS THROUGH OTHER GOVERNMENT AGENCIES FISCAL YEAR 1993

| <u>AGENCY</u> | <u>MILLIONS</u> | <u>% OF TOTAL</u> |
|-----------------------------|-----------------|-----------------------|
| <u>TOTAL</u> | <u>\$508.4</u> | <u>100.0</u> |
| <u>OVER \$25,000</u> | <u>389.6</u> | <u>76.6</u> |
| AIR FORCE | 189.9 | 37.3 |
| ENERGY DEPARTMENT | 55.0 | 10.8 |
| NAVY | 42.0 | 8.3 |
| ARMY | 31.0 | 6.1 |
| NATIONAL SCIENCE FOUNDATION | 17.2 | 3.4 |
| INTERIOR DEPARTMENT | 17.1 | 3.4 |
| COMMERCE DEPARTMENT | 12.4 | 2.4 |
| DEFENSE DEPARTMENT | 10.6 | 2.1 |
| OTHER GOV'T AGENCIES | 14.4 | 2.8 |
| <u>\$25,000 AND UNDER</u> | <u>118.8</u> | <u>23.4</u> |

VIII. U. S. GEOGRAPHICAL DISTRIBUTION OF AWARDS

In Fiscal Year 1993, 50 states and the District of Columbia participated in NASA's direct awards over \$25,000. These larger awards were distributed among 12,072 contracts and went to 2,999 different organizations in 1,030 different cities. Of the 2,999 organizations, 2,430 are business firms located in 837 cities in 46 states and the District of Columbia; 569 are educational and nonprofit institutions located in 366 cities in 50 states and the District of Columbia (See Page 35). The distribution of awards are also shown by region (See Page 36).

The categorization of NASA procurements by state is based on the location where the items are to be produced or supplied from stock; where the services will be performed; or with respect to construction contracts, the construction site.

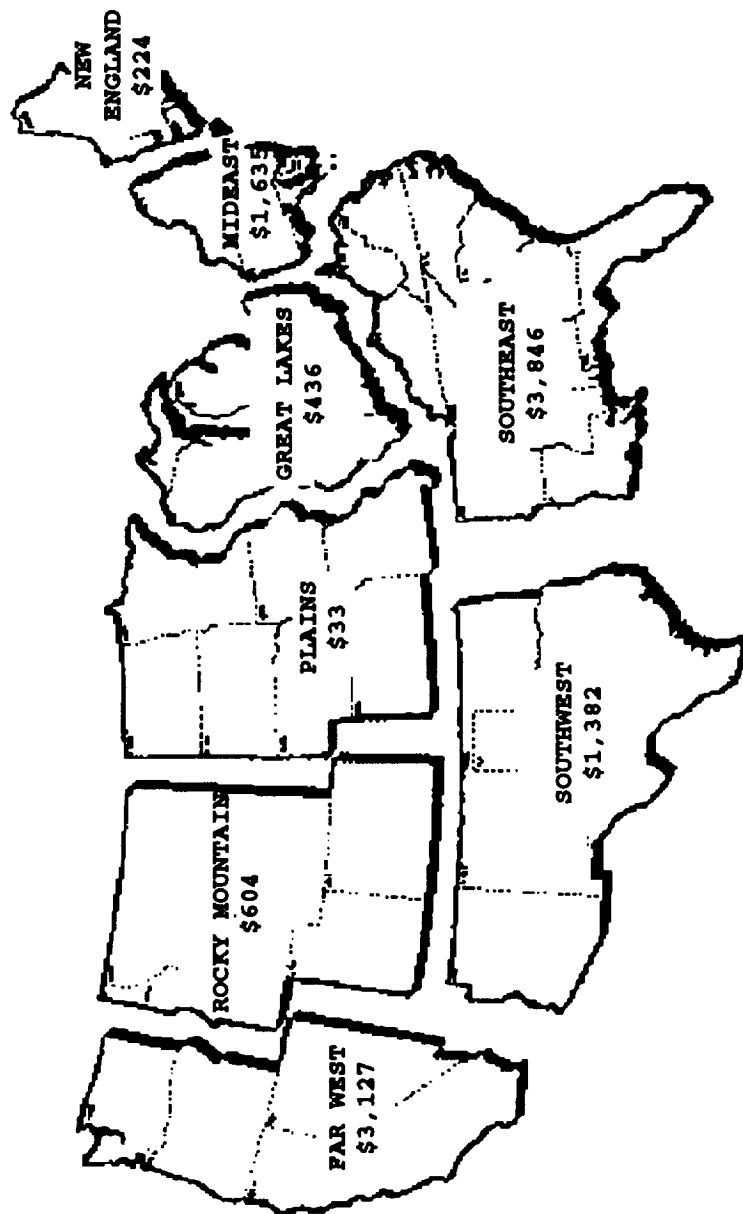
U.S. GEOGRAPHICAL DISTRIBUTION
OF NASA PRIME CONTRACT AWARDS
FISCAL YEAR 1993

| STATE | TOTAL (THOUSANDS) | BUSINESS (THOUSANDS) | EDUCATIONAL & NONPROFIT (THOUSANDS) |
|----------------|----------------------|-------------------------|---|
| TOTAL | \$11,317,310 | \$10,279,595 | \$1,037,715 |
| ALABAMA | 1,234,764 | 1,205,004 | 29,760 |
| ALASKA | 20,063 | -- | 20,063 |
| ARIZONA | 35,734 | 10,455 | 25,279 |
| ARKANSAS | 519 | 41 | 478 |
| CALIFORNIA | 3,083,877 | 2,907,066 | 176,811 |
| COLORADO | 112,823 | 89,040 | 23,783 |
| CONNECTICUT | 57,358 | 55,629 | 1,729 |
| DELAWARE | 2,814 | 524 | 2,290 |
| DIST COLUMBIA | 140,930 | 112,469 | 28,461 |
| FLORIDA | 1,377,189 | 1,356,193 | 20,996 |
| GEORGIA | 25,028 | 11,175 | 13,853 |
| HAWAII | 9,882 | 529 | 9,353 |
| IDAHO | (424) | -- | (424) |
| ILLINOIS | 15,954 | 3,490 | 12,464 |
| INDIANA | 18,546 | 13,794 | 4,752 |
| IOWA | 7,736 | 624 | 7,112 |
| KANSAS | 7,043 | 672 | 6,371 |
| KENTUCKY | 892 | 41 | 851 |
| LOUISIANA | 316,588 | 314,225 | 2,363 |
| MAINE | 826 | 254 | 572 |
| MARYLAND | 1,124,045 | 1,001,836 | 122,209 |
| MASSACHUSETTS | 146,072 | 34,519 | 111,553 |
| MICHIGAN | 38,598 | 4,019 | 34,579 |
| MINNESOTA | 5,652 | 1,773 | 3,879 |
| MISSISSIPPI | 264,228 | 258,871 | 5,357 |
| MISSOURI | 9,825 | 4,991 | 4,834 |
| MONTANA | 1,422 | 300 | 1,122 |
| NEBRASKA | 1,731 | 632 | 1,099 |
| NEVADA | 953 | 261 | 692 |
| NEW HAMPSHIRE | 15,330 | 3,906 | 11,424 |
| NEW JERSEY | 194,920 | 187,804 | 7,116 |
| NEW MEXICO | 63,999 | 54,964 | 9,035 |
| NEW YORK | 57,349 | 26,029 | 31,320 |
| NORTH CAROLINA | 10,865 | 2,282 | 8,583 |
| NORTH DAKOTA | 370 | 110 | 260 |
| OHIO | 324,700 | 287,029 | 37,671 |
| OKLAHOMA | 7,723 | -- | 7,723 |
| OREGON | 8,334 | 4,442 | 3,892 |
| PENNSYLVANIA | 115,217 | 93,801 | 21,416 |
| RHODE ISLAND | 4,470 | 808 | 3,662 |
| SOUTH CAROLINA | 3,289 | 1,709 | 1,580 |
| SOUTH DAKOTA | 1,158 | 260 | 898 |
| TENNESSEE | 40,670 | 11,362 | 29,308 |
| TEXAS | 1,274,392 | 1,189,046 | 85,346 |
| UTAH | 489,237 | 485,367 | 3,870 |
| VERMONT | 467 | 231 | 236 |
| VIRGINIA | 537,196 | 492,784 | 44,412 |
| WASHINGTON | 33,736 | 23,501 | 10,235 |
| WEST VIRGINIA | 34,528 | 140 | 34,388 |
| WISCONSIN | 38,150 | 25,593 | 12,557 |
| WYOMING | 542 | -- | 542 |

Note: Excludes smaller procurements, generally those of \$25,000 or less; also excludes awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts.

U.S. GEOGRAPHICAL DISTRIBUTION OF NASA PRIME CONTRACT AWARDS
FISCAL YEAR 1993

(Millions of Dollars)



Excludes smaller procurements, generally those of \$25,000 or less;
also excludes awards placed through other Government agencies, awards
outside the U.S., and awards on the JPL contracts.

IX. AWARDS PLACED OUTSIDE THE UNITED STATES

During Fiscal Year 1993, NASA placed \$80.6 million in awards that are being performed outside the United States.

As indicated in the following tabulation, \$80.5 million represented direct NASA awards and \$96 thousand constituted awards placed through other Government agencies. The awards are being performed in sixteen countries and one U.S. territory.

| <u>PLACE OF PERFORMANCE</u> | <u>(THOUSANDS)</u> |
|----------------------------------|--------------------|
| <u>TOTAL</u> | <u>\$80,583*</u> |
| <u>DIRECT NASA AWARDS</u> | <u>\$80,487</u> |
| AUSTRALIA | 12,216 |
| BERMUDA | 613 |
| CANADA | 36,479 |
| CHILE | 1,406 |
| FRANCE | 125 |
| GERMANY | 2,445 |
| ISRAEL | 63 |
| ITALY | 150 |
| JAPAN | 698 |
| LIECHTENSTEIN | 137 |
| NETHERLANDS | 281 |
| NORWAY | 35 |
| PUERTO RICO | 972 |
| RUSSIA | 3,796 |
| SPAIN | 19,625 |
| SWITZERLAND | 389 |
| UNITED KINGDOM | 1,057 |
| <u>PLACED THROUGH</u> | |
| <u>OTHER GOVERNMENT AGENCIES</u> | <u>\$96</u> |
| CANADA | 13 |
| PUERTO RICO | 83 |

*Excludes smaller procurements, generally those of \$25,000 or less.

X. PROCUREMENT ACTIVITY BY INSTALLATION

Most of NASA's purchases and contracts are made by the procurement offices of its field installations. During Fiscal Year 1993, these offices accounted for 93 percent of the total procurement dollars.

| <u>INSTALLATION</u> | <u>AWARDS (MILLIONS)</u> | <u>PERCENT</u> |
|--------------------------|------------------------------|----------------|
| <u>TOTAL</u> | <u>\$13,160.4</u> | <u>100.0</u> |
| MARSHALL SPC FLT CENTER | 3,001.8 | 22.8 |
| JOHNSON SPACE CENTER | 2,644.4 | 20.1 |
| GODDARD SPC FLT CENTER | 2,181.2 | 16.6 |
| KENNEDY SPACE CENTER | 1,415.4 | 10.8 |
| NASA RESIDENT OFFICE/JPL | 1,068.4 | 8.1 |
| LEWIS RESEARCH CENTER | 873.5 | 6.6 |
| HEADQUARTERS | 863.4 | 6.6 |
| AMES RESEARCH CENTER | 567.2 | 4.3 |
| LANGLEY RESEARCH CENTER | 436.1 | 3.3 |
| STENNIS SPACE CENTER | 109.0 | .8 |

GLOSSARY

The data contained in this publication were compiled on the basis of the definitions given below:

1. Sealed Bids - Procurement actions resulting from acceptance of bids made by contractors in response to invitations for bid.
2. Award - See procurement action.
3. Coverage
 - a. Summary data are provided in terms of obligations on all procurement actions (see item 8). The obligation data are obtained from the agency's fiscal records.
 - b. Detailed data - Information on procurements includes all contracts, grants, agreements and all other procurements over \$25,000. Wherever exclusions apply, a generalized footnote is provided, e.g.; "excludes smaller procurements, generally those of \$25,000 or less".
4. Intragovernmental - Procurement actions placed through other Government agencies; except orders placed under Federal Supply Schedule contracts and awards to small disadvantaged business through the Small Business Administration under Section 8(a) of the Small Business Act.
5. Modification - Any written alteration in the specifications, delivery point, contract period, price, quantity, or other contract requirement of an existing contract, whether accomplished by unilateral action in accordance with a contract clause or by mutual agreement of the parties to the contract. It includes (a) bilateral actions, such as supplemental agreements, and (b) unilateral actions, such as change orders, notices of termination, and notices of the exercise of an option.
6. Competitive - Procurements where offers are solicited from more than one responsible offeror capable of satisfying the Government's requirements wholly or partially, and the award or awards were made on the basis of price, design or technical competition.

7. Other Than Competitive - Procurements where an offer was solicited and received from only one responsible offeror capable of satisfying the Government's requirements wholly or partially. (Includes contracts resulting from unsolicited proposals.)
8. Procurement Action (Award) - Any contractual action to obtain supplies, services or construction which increase or decrease funds, including:
 - a. Letter contracts or other preliminary notices of negotiated awards.
 - b. Definitive contracts, including purchase orders.
 - c. Orders under GSA Federal Supply Schedule contracts, basic ordering agreements, and against indefinite delivery type contracts.
 - d. Intragovernmental orders.
 - e. Grants.
 - f. Cooperative and Space Act Agreements.
 - g. Supplemental agreements, change orders, administrative changes and terminations to existing procurements.
9. Small Business - For purposes of Government procurement, is a profit making concern, including its affiliates, which is independently owned and operated, is not dominant in its field and further qualifies under the size standards criteria of the Small Business Administration (SBA). These criteria are published under Title 13 of the Code of Federal Regulations, Section 121.3-8, and in the Federal Acquisition Regulation, Part 19, Subpart 19.1. For service industries, the size standard generally is based on average annual receipts over a three-year period, depending on the service to be procured. Generally, in the case of agricultural or manufactured products, the size standards are determined on the basis of number of employees. The applicable size standard is prescribed in each NASA solicitation.

APPENDIXES

DISTRIBUTION OF DIRECT NASA PROCUREMENTS

FISCAL YEARS 1961 - 1970

| TYPE | FY 1961 | FY 1962 | FY 1963 | FY 1964 | FY 1965 | FY 1966 | FY 1967 | FY 1968 | FY 1969 | FY 1970 |
|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | | | | | | | | | |
| Total | <u>\$755.5</u> | <u>\$1,550.6</u> | <u>\$3,230.5</u> | <u>\$4,593.9</u> | <u>\$5,187.4</u> | <u>\$5,031.6</u> | <u>\$4,650.2</u> | <u>\$4,132.7</u> | <u>\$3,652.0</u> | <u>\$3,405.6</u> |
| Business Firms | 423.3 | 1,030.1 | 2,261.7 | 3,521.1 | 4,141.4 | 4,087.7 | 3,864.1 | 3,446.7 | 3,022.3 | 2,759.2 |
| Educational | | | 86.9 | 112.9 | 139.5 | 150.0 | 132.9 | 131.5 | 131.3 | 134.3 |
| Nonprofit | 24.5 | 50.2 | 15.3 | 29.1 | 25.3 | 27.7 | 39.6 | 33.6 | 32.3 | 33.0 |
| JPL | 86.0 | 148.5 | 230.2 | 226.2 | 247.2 | 230.3 | 222.2 | 207.2 | 156.3 | 179.8 |
| Government | 221.7 | 321.8 | 628.5 | 692.6 | 622.8 | 512.5 | 366.9 | 287.0 | 279.0 | 265.8 |
| Outside U.S. | * | * | 7.9 | 12.0 | 11.2 | 23.4 | 25.2 | 26.7 | 30.8 | 33.5 |
| Total | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| Business Firms | 56 | 66 | 70 | 77 | 79 | 81 | 83 | 83 | 83 | 81 |
| Educational | | | 3 | 2 | 3 | 3 | 3 | 3 | 4 | 4 |
| Nonprofit | 3 | 3 | ** | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| JPL | 12 | 10 | 7 | 5 | 5 | 5 | 5 | 5 | 4 | 5 |
| Government | 29 | 21 | 20 | 15 | 12 | 10 | 8 | 7 | 7 | 8 |
| Outside U.S. | * | * | ** | ** | ** | ** | ** | 1 | 1 | 1 |

*Included in Government. **Less than 0.5 percent.

APPENDIX I

DISTRIBUTION OF DIRECT NASA PROCUREMENTS (Cont'd)

FISCAL YEARS 1971 - 1979

| TYPE | FY 1971 | FY 1972 | FY 1973 | FY 1974 | FY 1975 | FY 1976 | FY 1977 | FY 1978 | FY 1979 |
|----------------|------------------|------------------|------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| | | | | Net Value of Awards (Millions) | | | | | |
| Total | <u>\$2,858.2</u> | <u>\$2,737.8</u> | <u>\$2,673.4</u> | <u>\$2,713.6</u> | <u>\$2,866.4</u> | <u>\$3,204.6</u> | <u>\$3,532.3</u> | <u>\$3,659.6</u> | <u>\$4,211.8</u> |
| Business Firms | 2,279.5 | 2,143.3 | 2,063.8 | 2,118.6 | 2,255.0 | 2,536.1 | 2,838.1 | 2,953.8 | 3,416.4 |
| Educational | 133.9 | 118.8 | 111.7 | 97.8 | 111.4 | 123.0 | 125.5 | 137.2 | 147.2 |
| Nonprofit | 29.3 | 28.0 | 26.4 | 39.3 | 33.0 | 32.0 | 32.0 | 42.8 | 50.8 |
| JPL | 173.3 | 210.8 | 202.3 | 215.2 | 234.5 | 263.7 | 289.0 | 283.8 | 338.6 |
| Government | 212.5 | 207.8 | 235.2 | 208.6 | 198.3 | 222.4 | 223.2 | 216.0 | 221.4 |
| Outside U.S. | 29.7 | 29.1 | 34.0 | 34.1 | 34.2 | 27.4 | 24.5 | 26.0 | 37.4 |
| | | | | Percent of Total | | | | | |
| Total | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| Business Firms | 80 | 78 | 77 | 78 | 79 | 79 | 80 | 81 | 81 |
| Educational | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Nonprofit | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| JPL | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Government | 7 | 8 | 9 | 8 | 7 | 7 | 6 | 5 | 5 |
| Outside U.S. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

*Less than 0.5 percent.

APPENDIX I

FISCAL YEARS 1980 - 1989

APPENDIX I

DISTRIBUTION OF DIRECT NASA PROCUREMENTS (Cont'd)

FISCAL YEARS 1990 - 1993

| TYPE | FY 1990 | FY 1991 | FY 1992 | FY 1993 | | | | | |
|----------------|-------------------|-------------------|-------------------|-------------------|--------------------------------|--|--|--|--|
| | | | | | Net Value of Awards (Millions) | | | | |
| <u>Total</u> | <u>\$12,565.2</u> | <u>\$13,159.0</u> | <u>\$13,478.2</u> | <u>\$13,160.4</u> | | | | | |
| Business Firms | 10,071.5 | 10,417.3 | 10,716.7 | 10,497.9 | | | | | |
| Educational | 513.6 | 592.0 | 659.3 | 707.8 | | | | | |
| Nonprofit | 200.6 | 244.0 | 297.8 | 336.6 | | | | | |
| JPL | 1,106.8 | 1,139.6 | 1,229.6 | 1,029.8 | | | | | |
| Government | 610.4 | 693.4 | 498.6 | 508.4 | | | | | |
| Outside U.S. | 62.3 | 72.7 | 76.2 | 79.9 | | | | | |
| | | | | | Percent of Total | | | | |
| <u>Total</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | | | | | |
| Business Firms | 80 | 79 | 79 | 80 | | | | | |
| Educational | 4 | 4 | 5 | 5 | | | | | |
| Nonprofit | 2 | 2 | 2 | 3 | | | | | |
| JPL | 9 | 9 | 9 | 8 | | | | | |
| Government | 5 | 5 | 4 | 4 | | | | | |
| Outside U.S. | * | 1 | 1 | * | | | | | |

*Less than 0.5 percent.

APPENDIX I

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS

FISCAL YEARS 1961 - 1970

| TYPE OF ACTION | FY 1961 | FY 1962 | FY 1963 | FY 1964 | FY 1965 | FY 1966 | FY 1967 | FY 1968 | FY 1969 | FY 1970 |
|-----------------------|----------------|------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | | | Net Value of Awards (Millions) | | | | | | | |
| <u>Total Business</u> | <u>\$423.3</u> | <u>\$1,030.1</u> | <u>\$2,261.7</u> | <u>\$3,521.1</u> | <u>\$4,141.4</u> | <u>\$4,087.7</u> | <u>\$3,864.1</u> | <u>\$3,446.7</u> | <u>\$3,022.3</u> | <u>\$2,759.2</u> |
| New Awards* | ** | 322.6 | 758.6 | 685.4 | 629.2 | 536.4 | 694.7 | 483.7 | 496.5 | 619.7 |
| Modifications | ** | 707.5 | 1,503.1 | 2,835.7 | 3,512.2 | 3,551.3 | 3,169.4 | 2,963.0 | 2,525.8 | 2,139.5 |
| <u>Competitive</u> | <u>276.8</u> | <u>565.8</u> | <u>1,302.0</u> | <u>2,119.5</u> | <u>2,630.1</u> | <u>2,692.5</u> | <u>2,698.4</u> | <u>2,185.1</u> | <u>1,632.7</u> | <u>1,628.7</u> |
| New Awards* | ** | 167.1 | 427.1 | 375.9 | 334.5 | 304.2 | 325.2 | 271.9 | 186.7 | 277.5 |
| Modifications | ** | 398.7 | 874.9 | 1,743.6 | 2,295.6 | 2,388.3 | 2,373.2 | 1,913.2 | 1,446.0 | 1,351.2 |
| <u>Noncompetitive</u> | <u>146.5</u> | <u>464.3</u> | <u>959.7</u> | <u>1,401.6</u> | <u>1,511.3</u> | <u>1,395.2</u> | <u>1,165.7</u> | <u>1,261.6</u> | <u>1,389.6</u> | <u>1,130.5</u> |
| New Awards* | ** | 155.5 | 331.5 | 309.5 | 294.7 | 232.2 | 369.5 | 211.8 | 309.8 | 342.2 |
| Modifications | ** | 308.8 | 628.2 | 1,092.1 | 1,216.6 | 1,163.0 | 796.2 | 1,049.8 | 1,079.8 | 788.3 |
| | | | Percent of Total | | | | | | | |
| <u>Total Business</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| New Awards* | ** | 31 | 34 | 20 | 15 | 13 | 18 | 14 | 16 | 22 |
| Modifications | ** | 69 | 66 | 80 | 85 | 87 | 82 | 86 | 84 | 78 |
| <u>Competitive</u> | <u>65</u> | <u>55</u> | <u>58</u> | <u>60</u> | <u>63</u> | <u>66</u> | <u>70</u> | <u>63</u> | <u>54</u> | <u>59</u> |
| New Awards* | ** | 16 | 19 | 11 | 8 | 7 | 8 | 8 | 6 | 10 |
| Modifications | ** | 39 | 39 | 49 | 55 | 59 | 62 | 55 | 48 | 49 |
| <u>Noncompetitive</u> | <u>35</u> | <u>45</u> | <u>42</u> | <u>40</u> | <u>37</u> | <u>34</u> | <u>30</u> | <u>37</u> | <u>46</u> | <u>41</u> |
| New Awards* | ** | 15 | 15 | 9 | 7 | 6 | 10 | 6 | 10 | 12 |
| Modifications | ** | 30 | 27 | 31 | 30 | 28 | 20 | 31 | 36 | 29 |

*Data on new contracts are restricted to contracts of \$10,000 and over.

**Data not compiled.

APPENDIX II

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS (Cont'd)

FISCAL YEARS 1971 - 1979

| TYPE OF ACTION | FY 1971 | FY 1972 | FY 1973 | FY 1974 | FY 1975 | FY 1976 | FY 1977 | FY 1978 | FY 1979 |
|--|------------------|------------------|------------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| | | | | Net Value of Awards (Millions) | | | | | |
| <u>Total Business</u> | <u>\$2,279.5</u> | <u>\$2,143.3</u> | <u>\$2,063.8</u> | <u>\$2,118.6</u> | <u>\$2,255.0</u> | <u>\$2,536.1</u> | <u>\$2,838.1</u> | <u>\$2,953.8</u> | <u>\$3,416.4</u> |
| New Awards* | 563.0 | 462.5 | 489.5 | 552.4 | 452.0 | 486.3 | 552.5 | 633.1 | 516.6 |
| Modifications | 1,716.5 | 1,680.8 | 1,574.3 | 1,566.2 | 1,803.0 | 2,049.8 | 2,285.6 | 2,320.7 | 2,899.8 |
| <u>Competitive</u> | <u>1,331.8</u> | <u>1,311.8</u> | <u>1,275.6</u> | <u>1,394.2</u> | <u>1,554.6</u> | <u>1,879.5</u> | <u>2,060.4</u> | <u>2,111.5</u> | <u>2,541.1</u> |
| New Awards* | 306.6 | 257.0 | 308.1 | 279.5 | 223.9 | 291.3 | 301.7 | 362.1 | 304.0 |
| Modifications | 1,025.2 | 1,054.8 | 967.5 | 1,115.4 | 1,330.7 | 1,588.2 | 1,758.7 | 1,749.4 | 2,237.1 |
| <u>Noncompetitive</u> | <u>947.7</u> | <u>831.5</u> | <u>788.2</u> | <u>723.7</u> | <u>700.4</u> | <u>656.6</u> | <u>777.7</u> | <u>842.3</u> | <u>875.3</u> |
| New Awards* | 256.4 | 205.5 | 181.4 | 272.9 | 228.1 | 195.0 | 250.8 | 271.0 | 212.6 |
| Modifications | 691.3 | 626.0 | 606.8 | 450.8 | 472.3 | 461.6 | 526.9 | 571.3 | 662.7 |
| | | | | Percent of Total | | | | | |
| <u>Total Business</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| New Awards* | 24 | 22 | 24 | 26 | 20 | 19 | 20 | 22 | 15 |
| Modifications | 76 | 78 | 76 | 74 | 80 | 81 | 80 | 78 | 85 |
| <u>Competitive</u> | <u>58</u> | <u>61</u> | <u>62</u> | <u>66</u> | <u>69</u> | <u>74</u> | <u>73</u> | <u>72</u> | <u>74</u> |
| New Awards* | 13 | 12 | 15 | 13 | 10 | 11 | 11 | 13 | 9 |
| Modifications | 45 | 49 | 47 | 53 | 59 | 63 | 62 | 59 | 65 |
| <u>Noncompetitive</u> | <u>42</u> | <u>39</u> | <u>38</u> | <u>34</u> | <u>31</u> | <u>26</u> | <u>27</u> | <u>28</u> | <u>26</u> |
| New Awards* | 11 | 10 | 9 | 13 | 10 | 8 | 9 | 9 | 6 |
| Modifications | 31 | 29 | 29 | 21 | 21 | 18 | 18 | 19 | 20 |
| *Data on new contracts are restricted to contracts of \$10,000 and over. | | | | | | | | | |

APPENDIX II

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS (Cont'd)

FISCAL YEARS 1980 - 1985**

| TYPE OF ACTION | FY 1980 | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 | | | |
|--|------------------|------------------|------------------|--------------------------------|------------------|------------------|--|--|--|
| | | | | Net Value of Awards (Millions) | | | | | |
| <u>Total Business**</u> | <u>\$3,820.4</u> | <u>\$4,208.2</u> | <u>\$4,724.5</u> | <u>\$5,501.2</u> | <u>\$5,859.3</u> | <u>\$6,525.9</u> | | | |
| New Awards* | 634.3 | 479.3 | 717.6 | 761.0 | 716.6 | 775.9 | | | |
| Modifications | 3,186.1 | 3,728.9 | 4,006.9 | 4,740.2 | 5,142.7 | 5,750.0 | | | |
| <u>Competitive</u> | <u>2,858.1</u> | <u>3,127.7</u> | <u>3,436.5</u> | <u>3,845.3</u> | <u>4,286.6</u> | <u>\$5,030.2</u> | | | |
| New Awards* | 382.5 | 257.8 | 351.9 | 446.2 | 426.0 | 533.5 | | | |
| Modifications | 2,475.6 | 2,869.9 | 3,084.6 | 3,399.1 | 3,860.6 | 4,496.7 | | | |
| <u>Other Than</u> | | | | | | | | | |
| <u>Competitive</u> | <u>962.3</u> | <u>1,080.5</u> | <u>1,288.0</u> | <u>1,655.9</u> | <u>1,572.7</u> | <u>\$1,495.7</u> | | | |
| New Awards* | 251.8 | 221.5 | 365.7 | 314.8 | 290.6 | 242.4 | | | |
| Modifications | 710.5 | 859.0 | 922.3 | 1,341.1 | 1,282.1 | 1,253.3 | | | |
| | | | | Percent of Total | | | | | |
| <u>Total Business</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | | | |
| New Awards* | 17 | 11 | 15 | 14 | 12 | 12 | | | |
| Modifications | 83 | 89 | 85 | 86 | 88 | 88 | | | |
| <u>Competitive</u> | <u>75</u> | <u>74</u> | <u>72</u> | <u>70</u> | <u>73</u> | <u>77</u> | | | |
| New Awards* | 10 | 6 | 7 | 8 | 7 | 8 | | | |
| Modifications | 65 | 68 | 65 | 62 | 66 | 69 | | | |
| <u>Other Than</u> | | | | | | | | | |
| <u>Competitive</u> | <u>25</u> | <u>26</u> | <u>28</u> | <u>30</u> | <u>27</u> | <u>23</u> | | | |
| New Awards* | 7 | 5 | 8 | 6 | 5 | 4 | | | |
| Modifications | 18 | 21 | 20 | 24 | 22 | 19 | | | |
| *Data on new contracts are restricted to contracts of \$25,000 and over. | | | | | | | | | |
| **Excludes 8(a) awards | | | | | | | | | |

APPENDIX II

COMPETITION IN NASA AWARDS

FISCAL YEARS 1986 - 1993

| TYPE OF ACTION | FY 1986 | FY 1987 | FY 1988 | FY 1989 | FY 1990 | FY 1991 | FY 1992 | FY 1993 | |
|------------------------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|--|
| | | | | | | | | | |
| <u>Total Available</u> | \$7,310.3 | \$6,575.3 | \$7,350.4 | \$8,705.5 | \$10,202.3 | \$10,562.7 | \$10,877.3 | \$10,649.1 | |
| <u>Competed</u> | 4,950.1 | 5,031.7 | 5,890.3 | 6,995.8 | 8,318.4 | 8,169.8 | 8,660.9 | 8,635.6 | |
| New Awards | 772.5 | 827.3 | 1,091.0 | 891.7 | 1,059.6 | 679.5 | 699.1 | 766.7 | |
| Modifications | 4,177.6 | 4,204.4 | 4,799.3 | 6,104.1 | 7,258.8 | 7,490.3 | 7,961.8 | 7,868.9 | |
| <u>Not Competed</u> | 2,143.1 | 1,445.7 | \$1,279.4 | 1,376.3 | 1,338.5 | 782.8 | 780.2 | 699.0 | |
| New Awards | 289.4 | 404.5 | 193.0 | 214.7 | 244.5 | 123.6 | 161.8 | 241.4 | |
| Modifications | 1,853.7 | 1,041.2 | 1,086.4 | 1,161.6 | 1,094.0 | 659.2 | 618.4 | 457.6 | |
| <u>Follow-on</u> | 217.1 | 97.9 | 180.7 | 333.4 | 545.4 | 1,610.1 | 1,436.2 | 1,314.5 | |
| New Awards | 15.1 | .5 | 160.1 | 1.2 | 138.4 | 595.5 | 6.8 | .5 | |
| Modifications | 202.0 | 97.4 | 20.6 | 332.2 | 407.0 | 1,014.6 | 1,429.4 | 1,314.0 | |
| | | | | | | | | | |
| | | | | | | | | | |
| <u>Total Available</u> | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| <u>Competed</u> | 67.7 | 76.5 | 80.1 | 80.4 | 81.5 | 77.3 | 79.6 | 81.1 | |
| New Awards | 10.6 | 12.6 | 14.8 | 10.3 | 10.4 | 6.4 | 6.4 | 7.2 | |
| Modifications | 57.1 | 63.9 | 65.3 | 70.1 | 71.1 | 70.9 | 73.2 | 73.9 | |
| <u>Not Competed</u> | 29.3 | 22.0 | 17.4 | 15.8 | 13.1 | 7.4 | 7.2 | 6.6 | |
| New Awards | 3.9 | 6.2 | 2.6 | 2.5 | 2.4 | 1.2 | 1.5 | 2.3 | |
| Modifications | 25.4 | 15.8 | 14.8 | 13.3 | 10.7 | 6.2 | 5.7 | 4.3 | |
| <u>Follow-on</u> | 3.0 | 1.5 | 2.5 | 3.8 | 5.4 | 15.3 | 13.2 | 12.3 | |
| New Awards | .2 | * | 2.2 | * | 1.4 | 5.7 | .1 | * | |
| Modifications | 2.8 | 1.5 | .3 | 3.8 | 4.0 | 9.6 | 13.1 | 12.3 | |

APPENDIX IIA

*Less than .05 percent.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS

FISCAL YEARS 1961 - 1990

(Millions of Dollars)

| | FY 1961 | FY 1962 | FY 1963 | FY 1964 | FY 1965 | FY 1966 | FY 1967 | FY 1968 | FY 1969 | FY 1970 |
|-----------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| <u>TOTAL BUSINESS</u> | \$ 423.3* | \$1,030.1* | \$2,261.7 | \$3,521.1 | \$4,141.4 | \$4,087.7 | \$3,864.1 | \$3,446.1 | \$3,022.3 | \$2,759.2 |
| <u>SMALL BUSINESS</u> | 63.5 | 123.6 | 191.3 | 240.3 | 286.3 | 255.9 | 216.9 | 189.6 | 162.8 | 161.2 |
| % OF TOTAL | 15.0% | 12.0% | 8.5% | 6.8% | 6.9% | 6.3% | 5.6% | 5.5% | 5.4% | 5.8% |
| <u>SET-ASIDES</u> | 6.0 | 14.0 | 26.0 | 39.5 | 67.4 | 50.6 | 45.7 | 34.0 | 31.4 | 35.7 |
| % OF TOTAL | 1.4% | 1.3% | 1.1% | 1.1% | 1.6% | 1.2% | 1.2% | 1.0% | 1.0% | 1.3% |
| % OF SMALL | 9.4% | 11.3% | 13.6% | 16.4% | 23.5% | 19.8% | 21.1% | 17.9% | 19.3% | 22.1% |
| | FY 1971 | FY 1972 | FY 1973 | FY 1974 | FY 1975 | FY 1976 | FY 1977 | FY 1978 | FY 1979 | FY 1980 |
| <u>TOTAL BUSINESS</u> | \$2,279.5 | \$2,143.3 | \$2,063.8 | \$2,118.6 | \$2,255.0 | \$2,536.1 | \$2,838.1 | \$2,953.8 | \$3,416.4 | \$3,868.3 |
| <u>SMALL BUSINESS</u> | 178.1 | 160.9 | 155.3 | 181.2 | 216.0 | 218.3 | 255.0 | 281.5 | 325.4 | 384.6 |
| % OF TOTAL | 7.8% | 7.5% | 7.5% | 8.6% | 9.6% | 8.6% | 9.0% | 9.5% | 9.5% | 9.9% |
| <u>SET-ASIDES</u> | 41.1 | 45.1 | 47.3 | 61.5 | 62.6 | 66.8 | 83.7 | 92.5 | 99.4 | 175.2 |
| % OF TOTAL | 1.9% | 2.1% | 2.3% | 3.0% | 2.8% | 2.6% | 3.0% | 3.1% | 3.0% | 4.5% |
| % OF SMALL | 23.1% | 28.0% | 30.5% | 33.9% | 29.0% | 30.6% | 32.8% | 32.9% | 30.5% | 45.6% |
| | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 | FY 1986 | FY 1987 | FY 1988 | FY 1989 | FY 1990 |
| <u>TOTAL BUSINESS</u> | \$4,272.8 | \$4,805.6 | \$5,586.0 | \$5,967.4 | \$6,652.9 | \$6,356.0 | \$6,540.5 | \$7,274.9 | \$8,567.6 | \$10,071.5 |
| <u>SMALL BUSINESS</u> | 409.4 | 430.1 | 482.3 | 556.2 | 644.7 | 671.3 | 786.3 | 801.4 | 857.3 | 924.3 |
| % OF TOTAL | 9.6% | 8.9% | 8.6% | 9.3% | 9.7% | 10.6% | 12.0% | 11.0% | 10.0% | 9.2% |
| <u>SET-ASIDES</u> | 195.8 | 209.3 | 212.0 | 222.5 | 270.0 | 260.9 | 297.2 | 326.1 | 322.5 | 307.3 |
| % OF TOTAL | 4.6% | 4.4% | 3.8% | 3.7% | 4.1% | 4.1% | 4.5% | 4.5% | 3.8% | 3.1% |
| % OF SMALL | 47.8% | 48.6% | 43.9% | 40.0% | 41.9% | 38.9% | 37.8% | 40.7% | 37.6% | 33.2% |

*Excludes procurements placed under General Services Administration contracts

APPENDIX III

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS (Cont'd)

FISCAL YEARS 1991 - 1993

(Millions of Dollars)

| | FY 1991 | FY 1992 | FY 1993 | | | | | | |
|-----------------------|-------------------|-------------------|-------------------|--|--|--|--|--|--|
| <u>TOTAL BUSINESS</u> | <u>\$10,417.3</u> | <u>\$10,716.7</u> | <u>\$10,497.9</u> | | | | | | |
| <u>SMALL BUSINESS</u> | <u>968.3</u> | <u>1,010.6</u> | <u>1,060.7</u> | | | | | | |
| <u>% OF TOTAL</u> | <u>9.3%</u> | <u>9.4%</u> | <u>10.1%</u> | | | | | | |
| <u>SET-ASIDES</u> | <u>324.3</u> | <u>274.9</u> | <u>315.1</u> | | | | | | |
| <u>% OF TOTAL</u> | <u>3.1%</u> | <u>2.6%</u> | <u>3.0%</u> | | | | | | |
| <u>% OF SMALL</u> | <u>33.5%</u> | <u>27.2%</u> | <u>29.7%</u> | | | | | | |
| <u>TOTAL BUSINESS</u> | | | | | | | | | |
| <u>SMALL BUSINESS</u> | | | | | | | | | |
| <u>% OF TOTAL</u> | | | | | | | | | |
| <u>SET-ASIDES</u> | | | | | | | | | |
| <u>% OF TOTAL</u> | | | | | | | | | |
| <u>% OF SMALL</u> | | | | | | | | | |
| <u>TOTAL BUSINESS</u> | | | | | | | | | |
| <u>SMALL BUSINESS</u> | | | | | | | | | |
| <u>% OF TOTAL</u> | | | | | | | | | |
| <u>SET-ASIDES</u> | | | | | | | | | |
| <u>% OF TOTAL</u> | | | | | | | | | |
| <u>% OF SMALL</u> | | | | | | | | | |

APPENDIX III

